NOTE

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THE
SEA-MIRROVR

Containing,

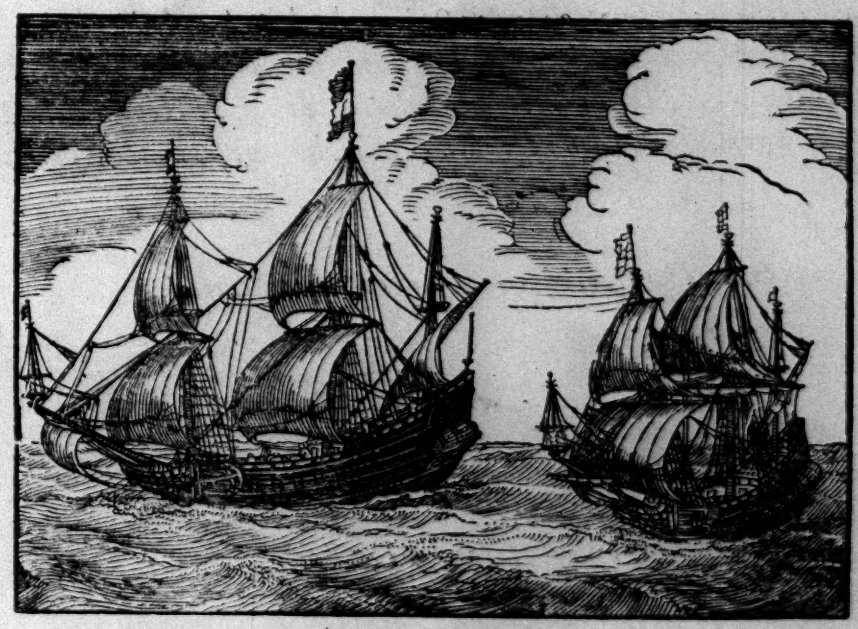
A BRIEFE INSTRVCTION
In the Art of Navigation;

AND

A DESCRIPTION OF THE
Seas and Coasts of the Easterne, Northerne,
and VVesterne Navigation;

COLLECTED AND COMPILED TOGETHER
Out of the Discoueries of many Skilfull and expert Sea-men,
BY
WILLIAM IOHNSON BLAEVW;

And Translated out of *Dutch* into *English*, by
RICHARD HYNMERS.



AMSTERDAM,
Printed by VVILLIAM IOHNSON BLAEVW, dvvelling
vpon the Water, by the Old Bridge, at the Signe of the
Golden Sunne-Dyall. 1625.

Cum Priuilegio.

Extract uyt de Privilegie.

DE *Staten Generael der Vereenichde Nederlanden, hebben gheconſenteert ende geoctroyeert, conſenteren ende octroyeren midts deſen,* Wilhem Ianſz Blaeuw, *Boeckverkooper binnen* Amſtelredam, *dat hy voor den tijdt van thien Iaren naeſtkomende, alleene inde Vereenichde Prouincien ſal mogen drucken, doen drucken, uytgeven ende verkoopen ſeecker Boeck ghenaemt* ZEE-SPIEGEL, Inhoudende eene korte Onderwyſinge inde konſt der Zeevaert, ende beſchryvinghe der Zee'n ende Kuſten vande Ooſterſche, Noordſche en Weſterſche Schipvaert.

Verbiedende alle ende een yeghelijck Ingeſetenen van deſe Landen, 't voorſz Boeck in't geheel ofte ten deele, in't groote ofte in't kleyne, in eenigherhande Tale ofte Sprake: midtſgaders de vermeerderinghe ofte verbeteringhen van tijdt tot tijdt daer by te doen, ende op het compendium van 't ſelve Boeck, gheintituleert Tafelen vande declinatie der Sonne, en voornaemſte vaſte Sterren, ende van't verſcheyden ghebruyck der Noordſterre, *nae te drucken, doen nae drucken, uytgeven, ende verkoopen, ghedurende den voorſz tijdt van thien Jaren naeſtkomende, ſonder des Suppliants conſent, by verbeurte vande voorſz nagedruckte Boecken, ende daerenboven vande ſomme van ſes hondert Carolus guldens, t'appliceren een derdendeel daer van tot behoef vanden Officier die de Calengie doen ſal, het tweede derdendeel tot behoef vanden Armen, ende het reſterende derdendeel tot behoef van den voorſz* Wilhem Ianſz Blaeuw. *Ghedaen ter vergaderinghe van de Hooghemelte Heeren Staten Generael. In's Gravenhaghe op den negenden Meert duyſent ſes hondert drientvvintich.*

S. van Haerſolte. *vt.*

Ter Ordonnantie vande Hoochghemelte Heeren Staten Generael.

C. Aerſſens.

TO
ALL VIGILLANT
SHIP-MASTERS, PILOTES,
MASTERS-MATES, AND LOVERS
OF NAVIGATION.

EXpert farre trauelling vvorthy Sea-men, hauing conſidered how acceptable my former Seacard-Booke, THE LIGHT OF NAVIGATION, hath beene vnto you, and vnderſtanding by the teſtimonie of diuers, hovv fruitfull and profitable it hath beene vnto many, I was therefore with ſo much the more affection moued according to my abillitie to do you greater ſeruice for the furtherance of the renowmed and vniuerſall Nauigation, which although it doth yeeld vnto all Kingdomes and Countreys no ſmall profit and commoditie, yet vnto our beloued natiue Countrey in a more ſpeciall manner, and moſt of all benefitiall, as vvell in regard of the common vvelfare in matters which concerne the warres, as eſpecially in the trade of Merchandize, I haue therefore with all poſſible induſtry and dilligence collected and brought together all that might ſerue not onely for amending of that which vvas amiſſe in the forenamed Seacard-Booke, or vvhat by courſe of times doth alter, but alſo for enlargement, a more large and plaine Inſtruction. And vvithall haue newly calculated the Tables of the Declination of the Sun, and of the moſt notable fixed Starres, and the vſe of them changed, according to this preſent time, and that brought together in this Booke: So that herein, as in a cleere Mirrour or Looking-Glaſſe, you may behold (beſides the right vſe of the foreſaid Celeſtiall Lights) the true lying of the Seas and Coaſts of the Lands, of the Eaſterne, Northerne, and VVeſterne Nauigation, and a Sea man may certainly obſerue, how and after vvhat manner he is to gouerne himſelfe in ſayling on the ſaid Seas, vvhat is needfull for him to follow or to ſhun and auoid, that ſo with the helpe of the Almightie, he may ſtiere both Ship and goods into a ſafe and wished for Hauen.

THE PREFACE.

Now if by chance any thing be found through want of knowledge or through want of good information(which wants we haue heretofore had) to be ſet downe amiſſe(ſeeing it is the propertie of men to be ſubiect to faile, eſpecially in ſuch like Treatiſes of great importance) I doe pray and entreate euerie one that shall know any ſuch default, that he will be pleaſed to enforme me of the ſame, and for the furthering of ſo worthy and profitable a VVorke to lend me his helping hand,for the benefite of the common good, ſeeing that oftentimes thereon dependeth not onely the ſafetie and loſſe of Ship and goods,but alſo the welfare and liues of the Seafaring-men,I am readie and willing at mine owne coſt and charges to amend any thing that requireth correction for the commoditie and preſeruation of my Neighbour; In hope whereof,I wish you all vvorthy Sea-men, that you may proſperouſly ſayle, and happely arriue to your vvished Hauens, vſing vvith ſmall charge that,vvhich vvith great coſt and paines is here collected together,and is vnto you moſt vvillingly imparted by Me readie to doe you ſeruice,

WILLIAM IOHNSON BLAEVW.

THE FIRST PART of the SEA-MIRROVR

Containing

A BRIEFE INSTRVCTION

In the Art of Navigation;

Written by WILLIAM IOHNSON BLAEVW.

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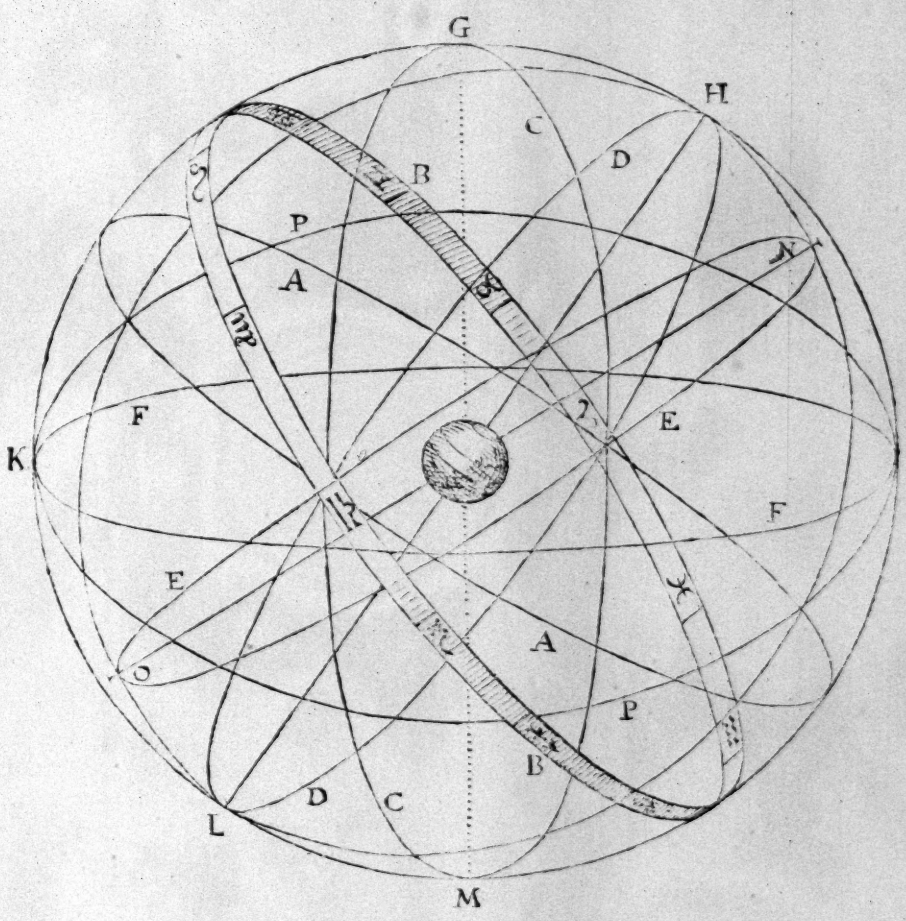


AMSTERDAM,

Printed by WILLIAM IOHNSON BLAEVW, dvvelling upon the Water, by the Old Bridge, at the Signe of the Golden Sunne-dyall. 1625.

Cum Privilegio.

A BRIEFE INSTRVCTION IN THE ART OF NAVIGATION.

THE Art of Nauigation is a knowledge by certaine rules for to ſtiere a Ship through the Sea from the one place to the other, and may (not improperly) be deuided into two parts, Namely, Into the Common and Great Nauigation.

The Common Nauigation requires the vſe of no Inſtruments but the Compaſſe and Sounding Lead, as chiefely conſiſting in Practice and Experience, in knowledge of Lands and Points, how they lye in diſtance and courſe one from the other, and how they are knowne at Sea, in knowledge of Depths and Showldes, and varieties of Grounds, the courſe and ſetting of Tydes, vpon what Point of the Compaſſe the Moone maketh high Water in each ſeuerall place, and the like, which muſt be learned partly by the information of skilfull Pilotes, but eſpecially by mens owne proper practice and experience.

The Great Nauigation vſeth (beſides the foreſaid common practice) diuers other artifitiall Inſtruments and rules, which they muſt take out of Aſtronomie and Coſmography. It is therefore needfull that euerie Pilote that will vſe and practice the Great Nauigation, be firſt and chiefely well inſtructed in the principall points of the foreſaid Arts, That is, That he know and vnderſtand the order and deuiſion of the Spheare of the World, the motion of the Heauens, eſpecially of the eighth, fourth, and firſt, together with the contriuing or making and vſe of Inſtruments, without which knowledge it is impoſſible happely to performe great voyages (not before attempted) ouer the Ocean Sea. And in regard ſuch knowledges may be attained to, by good inſtruction we haue ſet forth the ſame in this Treatiſe, for the benefite of all ſuch young Seafaring-men as are deſirous to learne the Art of Nauigation, ſo clearely and plainly as the breuitie of the ſame could ſuffer to be done.

CHAP. I.

Of the Spheare and the ſeuerall different motions of the ſame.

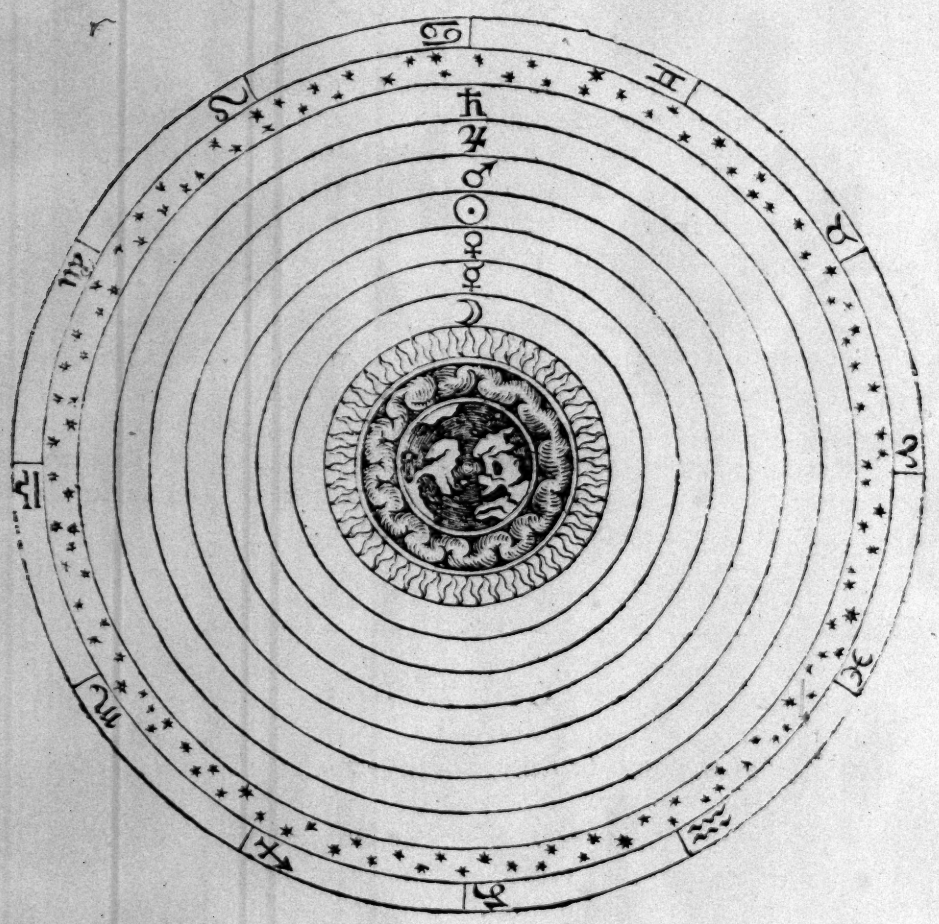
A Spheare is properly as much to ſay as a Globe, whole, faſt, and round, whoſe ſuperfitiall or vpper part is euerie where alike diſtant from his Center. By that Word Sphæra Mundi, or Spheare of the world, is commonly vnderſtood the whole Globe of the Heauens with all that therein is contained, which is deuided into two parts, Elementall & Celeſtial, The Elementall part hath againe foure parts, The firſt is the Earth, which with the Water as the ſecond maketh a perfect round Globe, whereupon we dwell; The third the Ayre comprehending the Earth, and the fourth the Fire, which according to the opinion of the Philoſophers, containeth the ſpace which is betweene the Ayre and the Heauen or Circle of the Moone. Out of theſe Elements (which

are the beginnings of all things, that are alwayes ſubiect to change) together with the warmth of the Heauens, doe come forth and decay all things which we ſee and finde vpon the Earth, by continuall change and motion of the one into the other.

The Celeſtiall part (containing within in the concauitie thereof, the Ellementall) is tranſparent and perſpicuous, ſhining, ſeuered, and free from all mutabilitie, and is deuided into eight Spheares or round hollow Globes, which are called Heauens, whereof the greateſt doth alwayes containe the next vnto it Globelike. The ſeuen inferiour haue each of them but one Starre or Plannet only, whereof the firſt (the next to the Earth) is the Heauen of the Moone, the ſecond of Mercurie, the third of Venus, the fourth of the Sunne, the fifth of Mars, the ſixth of Iupiter, the ſeuenth of Saturne, and the eighth, of all the fixed Starres. The number of theſe Heauens is knowne by their courſes round about the Poles of the Zodiacke. The Moone runneth through her Heauen by her naturall courſe from the Weſt to the Eaſt in ſeuen and twentie dayes eight howres. Mercurie, Venus, and the Sunne their courſe in one yeere. Mars his courſe in two yeeres. Iupiter in twelue, and Saturne in thirtie yeeres. The eighth Heauen accompliſheth his proper courſe according to the obſeruation of Ticho Brahe, in 25400 yeeres.

Theſe Heauens are carried altogether in foure and twentie howres vpon the Poles about the Axeltree of the World, through the ninth Heauen, which is called Primum mobile, that is, the Firſt moueable, by which motion to our appearance is cauſed the day and night, and the daily riſing and ſetting of the Celeſtiall Lights.

The Spheare is demonſtrated vvith ſuch like Figure.



CHAP.

CHAP. II.

Of the roundneſſe of the Earth.

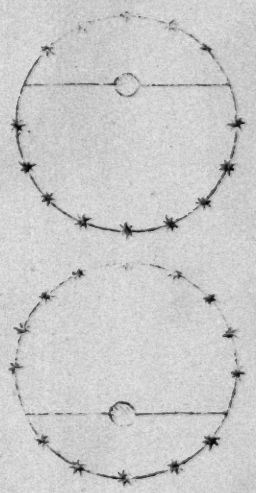
THat the Earth with the Water together, is a round Globe, it appeareth (beſides what experience hath taught vs herein) verie euidently by the ſhadow of the Earth in the Eclips of the Moone. For in what place ſoeuer of the Heauens the Moone is eclipſed, or touched by the ſhaddow of the Earth, the ſhaddow doth ſhow it ſelfe alwayes to be round. If the Earth were either foure ſquare, or three corner'd, or of any other forme, the ſhaddow in the Moone ſhould be alſo foure ſquare, three corner'd, or of another forme. For of ſuch forme as any body is, ſuch is alſo the ſhaddow thereof. Seeing then the ſhaddow of the Earth is alwayes and on euerie ſide round, the Earth it ſelfe muſt be alſo neceſſarily in like manner round.

That the Heauen is round, we can perceiue with our eyes, but it is indeed moſt euidently knowne by the Circular motion of the Celeſtiall Lights, as of the Sunne, Moone, and Starres.

CHAP. III.

That the Earth is in the middeſt of the VVorld.

THat the Earth ſtandeth in the middeſt of the World, may verie well be vnderſtood by this which followeth. If ſo be that the Globe of the Earth did not ſtand in the middeſt of the World, but neerer to the one ſide of the Heauen, it ſhould happen that the Starres in their daily reuolution, ſhould be neerer the Earth on the one ſide then on the other, and therefore ſhould ſhewe to our ſight greater on the one ſide then on the other. And alſo, if that part of the Heauen neereſt the Earth were aboue vs, then we ſhould ſee leſſe then the halfe of the Heauen, according as is ſhewed in the firſt Figure. And to the contrarie, if that part of the Heauen fartheſt from vs were aboue vs, then we ſhould ſee more then the one halfe of the Heauen, as is ſhewed by the ſecond Figure: But ſtanding vpon the flatte of the Globe of the Earth, wee ſee the Starres (in what part ſo euer of the Heauen that it alſo be) alwayes of one greatneſſe; and by experience it is manifeſt, that we alwayes ſee iuſt the one halfe of the Heauen, and the other halfe is hidden from our ſight, whence it is euident as is ſhewed in this third Figure, that the Earth ſtandeth in the middeſt of the World. Alſo thereby may be vnderſtood, that the Globe of the Earth in compariſon of the Heauen is no more then a point without thikneſſe; For if the Earth had any thickneſſe in compariſon of the Heauen, we ſhould by occaſion thereof (ſtanding vpon the Earth) not be able to ſee the one halfe of the Heauen, as is ſhewed by this fourth Figure.



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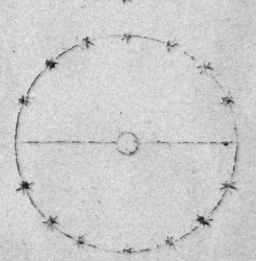

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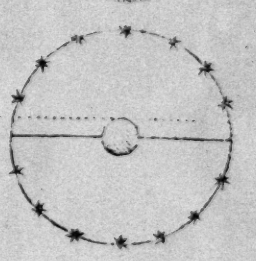

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CHAP.

CHAP. IIII.

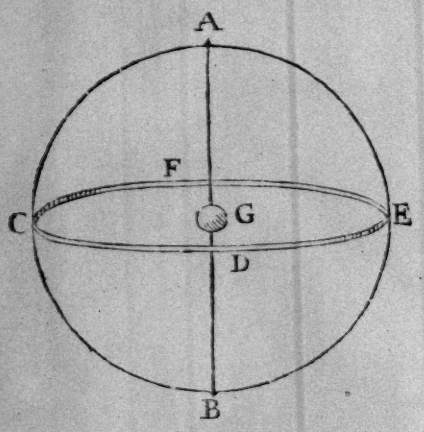
Of the greatneſſe of the Earth.

ALthough the Globe of the Earth (as hath beene ſaid) in compariſon of the exceeding great ſpaciouſneſſe of the Heauens, is no more then as a point or prick, yet notwithſtanding being conſidered in it ſelfe, it is a great body, containing in the greateſt circuite of it, 7200 Engliſh Leagues, which may be thus knowne. If you deuide the whole Circle of the Globe of the Earth into 360 parts or degrees, it is found as wel by Nauigation, as by meaſuring vpon the Land, that euerie ſuch part or degree containeth twentie ſuch Engliſh Leagues. Three hundred and ſixtie ſuch parts or degrees, then being multiplied by twentie, produce 7200 Leagues.

CHAP. V.

Of the Axis and Poles, or Axelpoints of the VVorld.

IN the Spheare of the World there is imagined a Line going from one point on the one ſide of the Spheare as a Diameter through the Center vnto another point right ouer againſt it on the other ſide: Such a Line is called the Axeltree, and the vttermoſt ends of it, or foreſaid points are called the Poles or Axeltree points of the World, the one in the North the North Pole, and the other in the South the South Pole. Vpon which Poles it is imagined that the Spheare is daily mooued about her Axeltree.



A declaration of the Figure.

The Line A G C in this Figure going from the Point A through the Center G, as a Diameter to the Point B ouer againſt it, ſheweth the Axeltree of the World, and the Points A and B the Poles, A Northwards the North Pole, and B Southwards the South Pole.

CHAP. VI.

Of the Equinoctiall Line.

IN the middeſt of the Heauens equally diſtant from both the Poles, there is imagined a great Circle, deuiding the whole Spheare into two equall parts, which is called the Equinoctiall, becauſe that when the Sunne commeth to or vnder that Circle (the which it doth the 22 of March, and the 23 of September) the day and night are euerie where vpon the Earth of a like length. The knowledge of this Circle is aboue all others neceſſarie in the Art of Nauigation, for to obſerue thereby how farre we are diſtant (either Northwards or Southwards) vpon the Earth from the ſame, alſo thereby the times and houres of the day are reckoned, the Declination of the Sunne and the Starres, and many other profitable obſeruations.

A declaration.

In the former Figure are A and B the Poles of the World, C D E F is the Equinoctiall Line, in the middeſt of the Heauen equally diſtant from both the Poles A and B which deuideth the whole Spheare A C B E into two equall parts, as C A E the Norther, and C B E the Souther part.

Hence

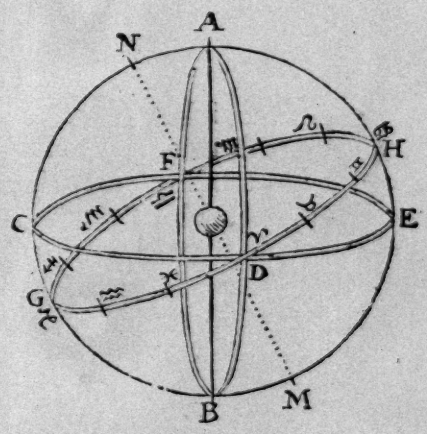
Hence it appeareth, that ſith the whole circumference of the Heauen is deuided into 360 Degrees, that the Poles doe ſtand 180 Degrees one from the other: And betweene the Poles and the Equinoctiall, there remains euerie way, and on euerie ſide 90 Degrees. This Line is drawne in the Cardes with a red Line from Eaſt to Weſt through the begining of the Degrees, as they are numbred either towards the North or towards the South.

CHAP. VII.

Of the Eclipticke Line, or the vvay of the Sunne.

THe Eclipticke Line lyeth oblique ouer the Equinoctiall, deuiding the ſame vpon two points, right againſt one another into two equall parts, and is alſo deuided by the ſame into two equall parts, the one lyeth betweene the Equinoctiall and the North Pole; the other betweene the Equinoctiall and the South Pole. His greareſt declination on either ſide of the Equinoctiall towards both the Poles, is 23 Degrees 31 ½ Minutes, and is deuided into twelue equall parts, and each of them hath a perticuler ſigne aſcribed to it. The Sunne goeth alongſt this Circle without euer declining out of it, and runneth through the ſame by his naturall courſe, once euerie yeere: And like as the Poles of the World doe ſtand euerie where alike farre from the Equinoctiall, ſo alſo hath this Eclipticke Line his two Poles euerie where alike farre diſtant from the ſame.

A declaration.



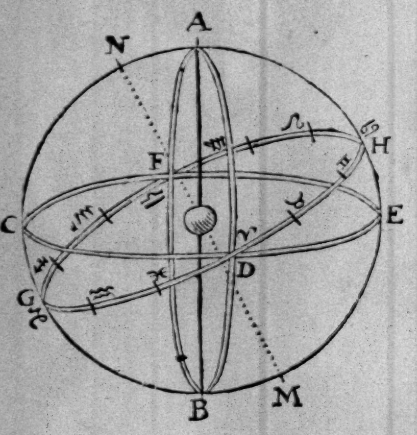
In this Figure as in the former, A B are the Poles of the World, C D E F the Equinoctiall, G D H F the Eclipticke Line, cutting and deuiding the Equinoctiall and it ſelfe alſo into two equall parts in the points D and F, which are called Equinoctiums: The one at D, the Equinoctium of the Spring; the other at F, the Equinoctium of the Harueſt. The one halfe D H F the Norther part, and lyeth betweene the Equinoctiall D E F and A the Norther Pole, at the moſt at E H declined from it 23 Degrees 31 ½ Minutes; the other halfe F G D the Souther part, lyeth betweene the Equinoctiall F C D and the Souther Pole B likewiſe at the moſt at C G declined from it 23 Degrees 31 ½ Minutes. The Norther part is deuided into ſixe Signes, which are called the Northerne, begining at D with the Signes aſcending to the Northwards, Aries, Taurus, Gemini, vnto H the point of the moſt declination. From thence with the Signes deſcending from the North, Cancer, Leo, Virgo, vnto the Equinoctiall Line in F the Equinoctium of the Harueſt. The Souther part likewiſe is deuided into ſixe Signes, which are called the Southerne, begining at F with the Signes deſcending towards the South, Libra, Scorpio, Sagitarius, vnto G the point of the greateſt declination towards the South, from thence with the Signes aſcending towards the North, Capricornus, Aquarius, Piſces, againe to the Equinoctiall Line, in the Equinoctium of the Spring D. The three firſt Northerne Signes, the Sunne runneth through from the 21 of March to the 21 of Iune, the other from the 21 of Iune to the 23 of September. The three firſt Southern from the 23 of September to the 23 of December, and the other from the 23 of December againe to the 21 of March. The Poles of the Eclipticke are M and N ſtanding euerie where equally diſtant from the Eclipticke G H, and ſo farre from the Poles of the World A and B as the Eclipticke is at the moſt diſtant from the Equinoctiall Line at H E and C G.

CHAP. VIII.

Of the Colures.

COlures are two Circles going croſſewiſe through both Poles of the World, deuiding one another in the Poles in two, and together the whole Spheare, Equinoctiall, Zodiacke or Eclipticke, and all the Parralels into foure equall parts, the one paſſing through the points of the Equinoctiums is called the Colure of the Equinoctiums; the other paſſeth through the points of the Solſtitialls, and is called the Colure of the Solſtitialls. The Sunne comming to theſe Circles (by his yeerely courſe in the Zodiacke) deuideth the yeere into foure quarters, as Spring, Summer, Autumne, and Winter.

A declaration.



In this Figure is A F B D the Colure of the Equinoctiums, passing through D and F the points of the Equinoctiums in the beginings of Aries and Libra, and through the Poles A and B. A C G B M E H the Colure Solstitiall, passing through H and G the points of the Solstitials, in the beginings of Cancer and Capricornus, where the Eclipticke is most distant from the Equinoctiall Line, through the Poles of the World A and B, and through the Poles of the Zodiacke M and N cutting through one another crosse-wise with right Angles in the Poles A and B, and deuiding the Zodiacke or Eclipticke into foure parts, as D H, H F, F G, and G D, the first whereof the Sunne passeth through in the Spring, the second in the Summer, the third in the Harueſt, and the fourth in the Winter.

These foresaid Circles of the Spheare are all great Circles that are drawne in the wideſt part of the Spheare, deuiding the same alwaies into two equall parts. There follow yet foure small Circles, which deuide the Spheare into vnequall parts.

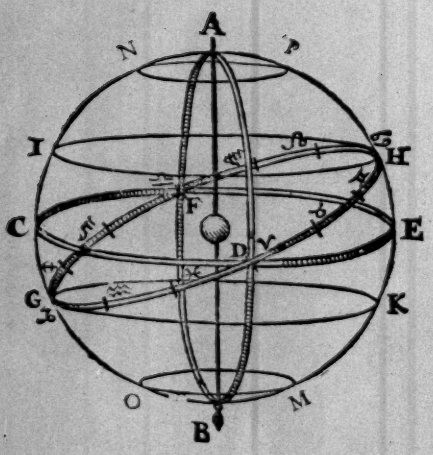
CHAP. IX.

Of the Tropickes and Circles Articke and Antarticke.

THe Tropicks are two Circles, the one Northwards, the other Southwards from the Equinoctiall and parralell with the same, which by the motion round about of the Spheare are drawne from the points of the Eclipticke Line fartheſt distant from the Equinoctiall, the one towards the North the Tropicke of Cancer, the other towards the South the Tropick of Capricornus.

The Circle Articke the Norther Circle, and the Circle Antarticke the Souther Circle are described or drawne (by the motion round about of the Spheare) of the Poles of the Eclipticke.

A declaration.



In this Figure H I the Tropicke of Cancer or the Sunnes turning of Cancer, which by the motion round about of the Spheare is described from the point H the begining of Cancer, and is so called becauſe that the Sunne comming to that point, and being at the fartheſt from the Equinoctiall towards the North, then turneth againe through Cancer, towards the Equinoctiall. G K is the Tropicke of Capricornus, or Sunnes turning of Capricornus, and is described by the motion round about of the Spheare from the point G the begining of Capricornus, and is so called, becauſe that the Sunne comming to that point and being at the fartheſt from the Equinoctiall towards the South, then turneth againe through Capricornus towards the Equinoctiall.

N P is the Circle Articke, and M O the Circle Antarticke which are described by the motion round about of the Spheare from the Poles of the Zodiacke N and M. Theſe are equally distant from the Poles of the World A and B, as the Tropickes are from the Equinoctiall Line, to wit, 23 Degrees 31 ½ Minutes.

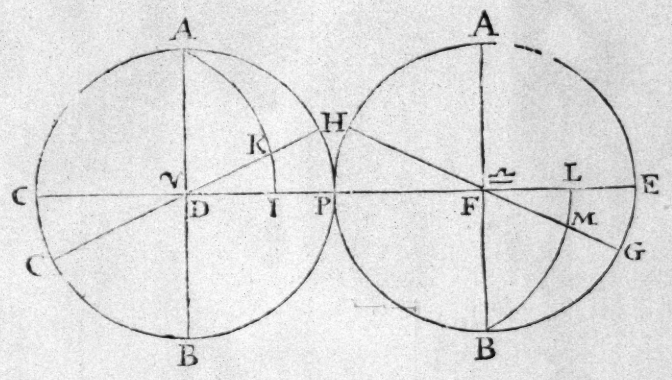
CHAP.

CHAP. X.

Of the Sunnes declination.

THe Sunnes declination is his distance from the Equinoctiall Line, which is two manner of wayes, towards the North and South.

A declaration.



The declination of the Sunne is causèd by his course alongst the Eclipticke Line thus: Let A be the North, and B the South Pole of the World, C P E the Equinoctiall, C H G the Eclipticke Line. The Sunne on the 21 of March comming in the begining of Aries at D, commeth also into the Equinoctiall Line, by reason whereof hath no declination, neither Northwards nor Southwards, but passing forth alongst the Ecliptick from D towards H, and comming vnto K, in the begining of Taurus, he shall be declined from the Equinoctiall Line towards the North from I to K 11 Degrees 30 Minutes. Proceeding till he come to H, is then at the farthest declined from P to H 23 Degrees 31 ½ Minutes. From thence prosecuting his course from H to F, he commeth againe to the Line into the begining of Libra, without declination. Proceeding from F towards G vnto M the begining of Sagitarie, he shall be declined from the Line F E, towards the South from L to M 20 Degrees 13 Minutes. Comming to G, he is from B to G at the farthest declined Southwards. From thence he takes his course vnto D againe to the Equinoctiall Line, fully accomplishing his course in one yeere.

CHAP. XI.

For to finde the Sunnes declination vpon euerie day of the yeere.

THe Sunnes yeere (that is the time that the Sunne goeth out of a certain point in the Eclipticke, and returneth again into the same) is not of 365 dayes iust, but about 5 houres and 49 minutes more (that is a little lesse then 6 houres) wherfore after three yeeres there is alwayes added to the fourth foure times sixe houres, that is a day more in February, for to count the yeere or the reuolution of the Sunne in euen dayes, therefore that fourth yeere is called Leape yeere. If men will then describe the declination of the Sunne in Tables for euery seuerall day, it shall be needfull that there be foure seuerall Tables made, of foure such yeres following one the other. The foresaid difference, that foure reuolutions of the Sunne, doe not iustly agree with foure such yeeres, bringeth in processe of time so great a difference in the declination, that it is needfull euerie twentie yeeres to renew such Tables.

For to finde the declination of the Sunne vpon euerie day out of such Tables, two things are necessarie to be knowne: The first in what yeere we are in, whether in the Leape yere, or in the first, second or third following. The second, what Table must be vsed to such a knowne yeere.

For the first, deuide the yeere of our Lord aboue 1600 by 4, If the deuision doe fall out euen without any ouerplus, that yeere is then a Leape yeere of 366 dayes: But if out of the deuision there remaine any number, that remainder sheweth how many yeeres that yeere propounded is after the Leape yeere.

1 Example.

I desire to know what yeere, the yeere 1624 is. Leauing the 1600, I deuide the 24 by 4, and it commeth euen out without any remaining ouerplus, for 6 times 4 is 24, whereby I finde that the yeere 1624 is a Leap yeere.

2 Example,

2 Example.

For to know what yeere the yeere 1635 is, Leauing the 1600 I deuide the 35 by 4, and finde that there remaines 3, for 8 times 4 is 32 that from 35 remaines 3, whereby I finde the yeere of 35 to be the third yeere after the Leape yeere.

For to know the same without reckoning, behold this Table following, the first Columne are Leape yeeres, the 2, 3, and 4 are the three yeeres after the Leape yeeres.

Leape yeeres.	First.	Second.	Third.
1624	1625	1626	1627
1628	1629	1630	1631
1632	1633	1634	1635
1636	1637	1638	1639

The Second: For to know what Table must be vsed for each yeere that standeth written aboue each of the Tables following.

1 Example.

I desire to know the declination of the Sunne, on the 20 of May, in the second yeere after the Leape yeere: I seeke in the Tables in the second yeere, the moneth May, and there vnder in the first Columne of the Ciphers the 20 day, I finde right against it in the second Columne 20 - 4, that is 20 Degrees, 4 Minutes, the declination of the Sunne, and seeing that is betweene the 20 of March and the 23 of September (that the Sunne is to the Northwards of the Line) the declination is Northerly.

2 Example.

Vpon the 12 of Februarie of the Leape yeere, I desire to know the declination of the Sunne, I seeke therefore in the Table of the Leape yeere the moneth Februarie, and finde in the first Columne the 12 day, and right against it 13 degrees 14 minutes for the declination of the Sunne vpon that day, & seeing that is between the 23 of September & 20 of March, that the Sun goeth to the Southwards of the Line, the declination is Southerly.

Here followv the Tables of the declination of the Sunne, calculated properly for the yeeres 1624, 1625, 1626, 1627, *for the Longitude or Meridian of the Lands-end of* ENGLAND, *becauſe that there they are moſt vſed about that Longitude by English and ſuch Seafaringmen, as vvell in the entring of the Channell of the Sea, as alongſt the Coaſts of* FRANCE, PORTVGALL, *and* SPAINE, *they may be able to ſerue vvithout any great preiudice or hurt for tvventie yeeres.*

A Table of the Declination of the Sunne according to the Newv Stile,

For the Leape yeere.

Ianuary.			February.			March.			Aprill.			May.			Iune.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*mtn.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	5	1	17	10	1	7	16	1	4	51	1	15	19	1	22	12
2	23	0	2	16	53	2	6	53	2	5	14	2	15	37	2	22	20
3	22	55	3	16	35	3	6	30	3	5	37	3	15	55	3	22	28
4	22	49	4	16	17	4	6	7	4	6	0	4	16	12	4	22	34
5	22	42	5	15	59	5	5	43	5	6	23	5	16	29	5	22	41
6	22	35	6	15	41	6	5	20	6	6	46	6	16	46	6	22	47
7	22	28	7	15	22	7	4	57	7	7	8	7	17	3	7	22	53
8	22	20	8	15	3	8	4	33	8	7	31	8	17	19	8	22	58
9	22	12	9	14	44	9	4	10	9	7	53	9	17	35	9	23	3
10	22	3	10	14	25	10	3	47	10	8	15	10	17	51	10	23	8
11	21	54	11	14	5	11	3	23	11	8	37	11	18	6	11	23	12
12	21	44	12	13	45	12	2	59	12	8	59	12	18	21	12	23	16
13	21	34	13	13	25	13	2	35	13	9	20	13	18	36	13	23	19
14	21	23	14	13	5	14	2	11	14	9	42	14	18	50	14	23	22
15	21	12	15	12	45	15	1	48	15	10	4	15	19	4	15	23	25
16	21	1	16	12	24	16	1	24	16	10	25	16	19	18	16	23	27
17	20	49	17	12	3	17	1	1	17	10	46	17	19	31	17	23	29
18	20	37	18	11	42	18	0	37	18	11	7	18	19	44	18	23	30
19	20	25	19	11	21	19	0	13	19	11	27	19	19	57	19	23	31
20	20	12	20	10	59	20	0	11	20	11	48	20	20	10	20	23	31
21	19	59	21	10	37	21	0	34	21	12	8	21	20	22	21	23	31½
22	19	45	22	10	15	22	0	58	22	12	28	22	20	34	22	23	31
23	19	31	23	9	53	23	1	21	23	12	48	23	20	45	23	23	30
24	19	17	24	9	31	24	1	45	24	13	8	24	20	56	24	23	29
25	19	2	25	9	9	25	2	8	25	13	27	25	21	7	25	23	28
26	18	47	26	8	47	26	2	32	26	13	47	26	21	18	26	23	26
27	18	32	27	8	24	27	2	55	27	14	6	27	21	28	27	23	23
28	18	16	28	8	1	28	3	18	28	14	25	28	21	37	28	23	21
29	18	0	29	7	39	29	3	42	29	14	43	29	21	46	29	23	17
30	17	44				30	4	5	30	15	1	30	21	55	30	23	14
31	17	27				31	4	28				31	22	4			

A Table of the Declination of the Sunne according to the Newv Stile,

For the Leape yeere.

Iuly.			Auguſt.			September.			October.			Nouember.			December.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	10	1	17	59	1	8	9	1	3	24	1	14	41	1	22	0
2	23	5	2	17	43	2	7	47	2	3	47	2	15	0	2	22	9
3	23	0	3	17	27	3	7	25	3	4	11	3	15	19	3	22	17
4	22	55	4	17	11	4	7	3	4	4	34	4	15	38	4	22	25
5	22	49	5	16	55	5	6	40	5	4	57	5	15	56	5	22	33
6	22	43	6	16	39	6	6	18	6	5	20	6	16	14	6	22	40
7	22	37	7	16	22	7	5	55	7	5	43	7	16	32	7	22	47
8	22	30	8	16	5	8	5	32	8	6	6	8	16	50	8	22	53
9	22	23	9	15	48	9	5	10	9	6	29	9	17	7	9	22	59
10	22	16	10	15	30	10	4	47	10	6	52	10	17	24	10	23	4
11	22	8	11	15	12	11	4	24	11	7	15	11	17	40	11	23	9
12	22	0	12	14	54	12	4	1	12	7	38	12	17	57	12	23	13
13	21	51	13	14	36	13	3	38	13	8	1	13	18	13	13	23	17
14	21	42	14	14	17	14	3	15	14	8	23	14	18	29	14	23	20
15	21	32	15	13	58	15	2	51	15	8	45	15	18	44	15	23	23
16	21	22	16	13	39	16	2	28	16	9	8	16	18	59	16	23	26
17	21	12	17	13	20	17	2	5	17	9	30	17	19	13	17	23	28
18	21	2	18	13	1	18	1	42	18	9	52	18	19	28	18	23	30
19	20	51	19	12	41	19	1	18	19	10	14	19	19	42	19	23	31
20	20	40	20	12	21	20	0	55	20	10	36	20	19	55	20	23	31
21	20	28	21	12	1	21	0	31	21	10	57	21	20	9	21	23	31½
22	20	16	22	11	41	22	0	7	22	11	18	22	20	22	22	23	31
23	20	4	23	11	21	23	0	16	23	11	39	23	20	34	23	23	30
24	19	51	24	11	0	24	0	39	24	12	0	24	20	46	24	23	29
25	19	38	25	10	39	25	1	3	25	12	21	25	20	58	25	23	27
26	19	25	26	10	18	26	1	26	26	12	42	26	21	9	26	23	25
27	19	12	27	9	57	27	1	50	27	13	2	27	21	20	27	23	22
28	18	58	28	9	36	28	2	13	28	13	22	28	21	31	28	23	19
29	18	43	29	9	15	29	2	37	29	13	42	29	21	41	29	23	15
30	18	29	30	8	53	30	3	1	30	14	2	30	21	51	30	23	11
31	18	14	31	8	31				31	14	22				31	23	6

A Table of the Declination of the Sunne according to the Newv Stile,

For the First yeere after the Leape yeere.

Ianuary.			February.			March.			Aprill.			May.			Iune.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	1	1	16	58	1	7	21	1	4	46	1	15	15	1	22	10
2	22	56	2	16	40	2	6	58	2	5	9	2	15	33	2	22	18
3	22	50	3	16	22	3	6	35	3	5	32	3	15	50	3	22	26
4	22	44	4	16	4	4	6	12	4	5	55	4	16	7	4	22	33
5	22	37	5	15	46	5	5	49	5	6	18	5	16	25	5	22	39
6	22	30	6	15	27	6	5	26	6	6	40	6	16	42	6	22	45
7	22	22	7	15	8	7	5	3	7	7	3	7	16	59	7	22	51
8	22	14	8	14	49	8	4	39	8	7	25	8	17	15	8	22	57
9	22	5	9	14	30	9	4	16	9	7	47	9	17	31	9	23	2
10	21	56	10	14	10	10	3	52	10	8	10	10	17	46	10	23	7
11	21	46	11	13	50	11	3	29	11	8	32	11	18	2	11	23	11
12	21	36	12	13	30	12	3	5	12	8	54	12	18	17	12	23	15
13	21	26	13	13	10	13	2	41	13	9	15	13	18	32	13	23	18
14	21	15	14	12	49	14	2	18	14	9	37	14	18	47	14	23	21
15	21	4	15	12	29	15	1	54	15	9	58	15	19	1	15	23	24
16	20	52	16	12	8	16	1	30	16	10	19	16	19	15	16	23	26
17	20	40	17	11	47	17	1	6	17	10	40	17	19	28	17	23	28
18	20	28	18	11	25	18	0	42	18	11	1	18	19	41	18	23	30
19	20	15	19	11	4	19	0	18	19	11	22	19	19	54	19	23	31
20	20	2	20	10	42	20	0	5	20	11	43	20	20	7	20	23	31
21	19	49	21	10	21	21	0	28	21	12	3	21	20	19	21	23	31½
22	19	35	22	9	59	22	0	52	22	12	23	22	20	31	22	23	31
23	19	21	23	9	37	23	1	16	23	12	43	23	20	43	23	23	31
24	19	6	24	9	15	24	1	39	24	13	3	24	20	54	24	23	30
25	18	51	25	8	52	25	2	3	25	13	23	25	21	5	25	23	28
26	18	36	26	8	30	26	2	26	26	13	42	26	21	15	26	23	26
27	18	20	27	8	7	27	2	49	27	14	1	27	21	25	27	23	24
28	18	4	28	7	44	28	3	13	28	14	20	28	21	35	28	23	21
29	17	48				29	3	36	29	14	39	29	21	44	29	23	18
30	17	32				30	4	0	30	14	57	30	21	53	30	23	14
31	15	15				31	4	23				31	22	2			

A Table of the Declination of the Sunne according to the Newv Stile,

For the First yeere after the Leape yeere.

Iuly.			Auguſt.			September.			October.			Nouember.			December.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	10	1	18	2	1	8	14	1	3	18	1	14	37	1	21	58
2	23	6	2	17	47	2	7	52	2	3	41	2	14	56	2	22	7
3	23	2	3	17	32	3	7	30	3	4	5	3	15	15	3	22	15
4	22	57	4	17	16	4	7	8	4	4	28	4	15	33	4	22	23
5	22	51	5	17	0	5	6	46	5	4	51	5	15	52	5	22	31
6	22	45	6	16	43	6	6	23	6	5	14	6	16	10	6	22	38
7	22	39	7	16	26	7	6	1	7	5	38	7	16	28	7	22	45
8	22	32	8	16	9	8	5	38	8	6	1	8	16	45	8	22	51
9	22	25	9	15	52	9	5	15	9	6	24	9	17	2	9	22	57
10	22	18	10	15	34	10	4	52	10	6	47	10	17	19	10	23	3
11	22	10	11	15	16	11	4	30	11	7	10	11	17	36	11	23	8
12	22	2	12	14	58	12	4	7	12	7	33	12	17	53	12	23	12
13	21	53	13	14	40	13	3	44	13	7	56	13	18	9	13	23	16
14	21	44	14	14	22	14	3	21	14	8	18	14	18	25	14	23	20
15	21	35	15	14	3	15	2	57	15	8	40	15	18	40	15	23	23
16	21	25	16	13	44	16	2	34	16	9	2	16	18	55	16	23	26
17	21	15	17	13	25	17	2	11	17	9	24	17	19	10	17	23	28
18	21	5	18	13	6	18	1	47	18	9	46	18	19	24	18	23	29
19	20	54	19	12	46	19	1	24	19	10	8	19	19	38	19	23	30
20	20	43	20	12	26	20	1	0	20	10	30	20	19	52	20	23	31
21	20	31	21	12	6	21	0	37	21	10	52	21	20	6	21	23	31½
22	20	19	22	11	46	22	0	13	22	11	13	22	20	19	22	23	31
23	20	7	23	11	26	23	0	10	23	11	34	23	20	31	23	23	30
24	19	54	24	11	5	24	0	34	24	11	55	24	20	43	24	23	29
25	19	41	25	10	44	25	0	57	25	12	16	25	20	55	25	23	28
26	19	28	26	10	23	26	1	21	26	12	37	26	21	7	26	23	26
27	19	15	27	10	2	27	1	44	27	12	57	27	21	18	27	23	23
28	19	1	28	9	41	28	2	8	28	13	17	28	21	29	28	23	20
29	18	47	29	9	20	29	2	31	29	13	37	29	21	39	29	23	16
30	18	32	30	8	58	30	2	54	30	13	57	30	21	49	30	23	12
31	18	17	31	8	36				31	14	17				31	23	8

A Table of the Declination of the Sunne according to the Nevv Stile,

For the Second yeere after the Leape yeere.

Ianuary.			February.			March.			Aprill.			May.			Iune.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	3	1	17	2	1	7	27	1	4	41	1	15	11	1	22	8
2	22	58	2	16	44	2	7	4	2	5	4	2	15	29	2	22	16
3	22	52	3	16	26	3	6	41	3	5	27	3	15	46	3	22	24
4	22	45	4	16	8	4	6	18	4	5	49	4	16	4	4	22	31
5	22	38	5	15	50	5	5	55	5	6	12	5	16	21	5	22	38
6	22	31	6	15	31	6	5	32	6	6	35	6	16	38	6	22	44
7	22	24	7	15	12	7	5	8	7	6	57	7	16	55	7	22	50
8	22	16	8	14	53	8	4	45	8	7	19	8	17	11	8	22	56
9	22	7	9	14	34	9	4	21	9	7	42	9	17	27	9	23	1
10	21	58	10	14	15	10	3	58	10	8	4	10	17	43	10	23	6
11	21	49	11	13	55	11	3	34	11	8	26	11	17	58	11	23	10
12	21	39	12	13	35	12	3	11	12	8	48	12	18	13	12	23	14
13	21	29	13	13	15	13	2	47	13	9	10	13	18	28	13	23	18
14	21	18	14	12	54	14	2	23	14	9	32	14	18	43	14	23	21
15	21	7	15	12	34	15	2	0	15	9	53	15	18	57	15	23	24
16	20	55	16	12	13	16	1	36	16	10	15	16	19	11	16	23	26
17	20	43	17	11	52	17	1	12	17	10	36	17	19	25	17	23	28
18	20	31	18	11	31	18	0	48	18	10	57	18	19	38	18	23	29
19	20	18	19	11	9	19	0	25	19	11	17	19	19	51	19	23	30
20	20	5	20	10	48	20	0	1	20	11	38	20	20	4	20	23	31
21	19	52	21	10	26	21	0	22	21	11	58	21	20	16	21	23	31½
22	19	38	22	10	4	22	0	45	22	12	18	22	20	28	22	23	31½
23	19	24	23	9	42	23	1	9	23	12	38	23	20	40	23	23	31
24	19	10	24	9	20	24	1	33	24	12	58	24	20	51	24	23	30
25	18	55	25	8	58	25	1	57	25	13	18	25	21	2	25	23	29
26	18	40	26	8	35	26	2	21	26	13	37	26	21	13	26	23	27
27	18	24	27	8	13	27	2	44	27	13	56	27	21	23	27	23	25
28	18	8	28	7	50	28	3	7	28	14	15	28	21	33	28	23	22
29	17	52				29	3	31	29	14	34	29	21	42	29	23	19
30	17	36				30	3	54	30	14	53	30	21	51	30	23	16
31	17	19				31	4	18				31	22	0			

A Table of the Declination of the Sunne according to the Newe Stile,

For the Second yeere after the Leape yeere.

Iuly.			Auguſt.			September.			October.			Nouember.			December.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	12	1	18	6	1	8	20	1	3	12	1	14	32	1	21	56
2	23	8	2	17	51	2	7	58	2	3	36	2	14	51	2	22	5
3	23	3	3	17	35	3	7	36	3	4	0	3	15	10	3	22	13
4	22	58	4	17	19	4	7	14	4	4	23	4	15	29	4	22	21
5	22	53	5	17	3	5	6	51	5	4	46	5	15	47	5	22	29
6	22	47	6	16	47	6	6	28	6	5	9	6	16	5	6	22	36
7	22	41	7	16	30	7	6	6	7	5	32	7	16	23	7	22	43
8	22	34	8	16	13	8	5	44	8	5	55	8	16	41	8	22	50
9	22	27	9	15	56	9	5	21	9	6	18	9	16	58	9	22	56
10	22	20	10	15	39	10	4	58	10	6	41	10	17	15	10	23	1
11	22	12	11	15	21	11	4	35	11	7	4	11	17	32	11	23	6
12	22	4	12	15	3	12	4	12	12	7	27	12	17	49	12	23	11
13	21	55	13	14	45	13	3	49	13	7	50	13	18	5	13	23	15
14	21	46	14	14	26	14	3	26	14	8	12	14	18	21	14	23	19
15	21	37	15	14	8	15	3	3	15	8	34	15	18	36	15	23	22
16	21	27	16	13	49	16	2	40	16	8	57	16	18	51	16	23	25
17	21	17	17	13	30	17	2	16	17	9	19	17	19	6	17	23	27
18	21	7	18	13	10	18	1	53	18	9	41	18	19	21	18	23	29
19	20	56	19	12	51	19	1	30	19	10	3	19	19	35	19	23	30
20	20	45	20	12	31	20	1	6	20	10	25	20	19	49	20	23	31
21	20	34	21	12	11	21	0	42	21	10	46	21	20	2	21	23	$31\frac{1}{2}$
22	20	22	22	11	51	22	0	19	22	11	8	22	20	15	22	23	$31\frac{1}{2}$
23	20	10	23	11	31	23	0	4	23	11	29	23	20	28	23	23	31
24	19	58	24	11	10	24	0	28	24	11	50	24	20	40	24	23	30
25	19	45	25	10	49	25	0	52	25	12	11	25	20	52	25	23	28
26	19	32	26	10	28	26	1	15	26	12	31	26	21	4	26	23	26
27	19	18	27	10	7	27	1	39	27	12	52	27	21	15	27	23	24
28	19	4	28	9	46	28	2	2	28	13	12	28	21	26	28	23	21
29	18	50	29	9	25	29	2	26	29	13	32	29	21	36	29	23	17
30	18	36	30	9	3	30	2	49	30	13	52	30	21	46	30	23	13
31	18	21	31	8	42				31	14	12				31	23	9

A Table of the Declination of the Sunne according to the Nevv Stile,

For the Third yeere after the Leape yeere.

Ianuary.			February.			March.			Aprill.			May.			Iune.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	4	1	17	6	1	7	33	1	4	35	1	15	6	1	22	6
2	22	59	2	16	48	2	7	10	2	4	58	2	15	24	2	22	14
3	22	53	3	16	31	3	6	47	3	5	21	3	15	42	3	22	22
4	22	47	4	16	13	4	6	24	4	5	44	4	16	0	4	22	29
5	22	40	5	15	55	5	6	0	5	6	7	5	16	17	5	22	36
6	22	33	6	15	36	6	5	37	6	6	29	6	16	34	6	22	43
7	22	26	7	15	17	7	5	14	7	6	52	7	16	51	7	22	49
8	22	18	8	14	58	8	4	50	8	7	14	8	17	7	8	22	54
9	22	9	9	14	39	9	4	27	9	7	37	9	17	23	9	22	59
10	22	0	10	14	20	10	4	3	10	7	59	10	17	39	10	23	4
11	21	51	11	14	0	11	3	40	11	8	21	11	17	55	11	23	9
12	21	41	12	13	40	12	3	16	12	8	43	12	18	10	12	23	13
13	21	31	13	13	20	13	2	53	13	9	5	13	18	25	13	23	17
14	21	21	14	13	0	14	2	29	14	9	27	14	18	40	14	23	20
15	21	10	15	12	39	15	2	6	15	9	48	15	18	54	15	23	23
16	20	58	16	12	18	16	1	42	16	10	9	16	19	8	16	23	25
17	20	46	17	11	57	17	1	18	17	10	30	17	19	22	17	23	27
18	20	34	18	11	36	18	0	54	18	10	51	18	19	35	18	23	29
19	20	22	19	11	15	19	0	31	19	11	12	19	19	48	19	23	30
20	20	9	20	10	53	20	0	7	20	11	33	20	20	1	20	23	31
21	19	55	21	10	31	21	0	17	21	11	53	21	20	13	21	23	31½
22	19	42	22	10	9	22	0	40	22	12	13	22	20	25	22	23	31½
23	19	28	23	9	47	23	1	4	23	12	33	23	20	37	23	23	31
24	19	13	24	9	25	24	1	28	24	12	53	24	20	48	24	23	30
25	18	58	25	9	3	25	1	51	25	13	13	25	20	59	25	23	29
26	18	43	26	8	41	26	2	15	26	13	33	26	21	10	26	23	27
27	18	28	27	8	18	27	2	38	27	13	52	27	21	20	27	23	25
28	18	12	28	7	55	28	3	2	28	14	11	28	21	30	28	23	23
29	17	56				29	3	25	29	14	30	29	21	40	29	23	20
30	17	40				30	3	49	30	14	48	30	21	49	30	23	16
31	17	23				31	4	12				31	21	58			

A Table of the Declination of the Sunne according to the Nevv Stile,

For the Third yeere after the Leape yeere.

Iuly.			Auguſt.			September.			October.			Nouember.			December.		
da.	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*	*da.*	*deg.*	*min.*
1	23	13	1	18	10	1	8	25	1	3	7	1	14	27	1	21	53
2	23	9	2	17	55	2	8	3	2	3	30	2	14	46	2	22	2
3	23	4	3	17	39	3	7	41	3	3	53	3	15	5	3	22	11
4	22	59	4	17	23	4	7	19	4	4	17	4	15	24	4	22	19
5	22	54	5	17	7	5	6	57	5	4	40	5	15	43	5	22	27
6	22	48	6	16	51	6	6	34	6	5	3	6	16	1	6	22	35
7	22	42	7	16	34	7	6	12	7	5	27	7	16	19	7	22	42
8	22	36	8	16	17	8	5	49	8	5	50	8	16	37	8	22	48
9	22	29	9	16	0	9	5	26	9	6	13	9	16	54	9	22	54
10	22	21	10	15	43	10	5	4	10	6	36	10	17	11	10	23	0
11	22	13	11	15	25	11	4	41	11	6	59	11	17	28	11	23	5
12	22	5	12	15	7	12	4	18	12	7	21	12	17	45	12	23	10
13	21	57	13	14	49	13	3	55	13	7	44	13	18	1	13	23	14
14	21	48	14	14	31	14	3	32	14	8	6	14	18	17	14	23	18
15	21	39	15	14	12	15	3	8	15	8	29	15	18	33	15	23	21
16	21	30	16	13	53	16	2	45	16	8	51	16	18	48	16	23	24
17	21	20	17	13	34	17	2	22	17	9	14	17	19	3	17	23	26
18	21	10	18	13	15	18	1	59	18	9	36	18	19	18	18	23	28
19	20	59	19	12	56	19	1	35	19	9	58	19	19	32	19	23	30
20	20	48	20	12	36	20	1	12	20	10	20	20	19	46	20	23	31
21	20	37	21	12	16	21	0	48	21	10	41	21	19	59	21	23	31½
22	20	25	22	11	56	22	0	25	22	11	3	22	20	12	22	23	31
23	20	13	23	11	36	23	0	1	23	11	24	23	20	25	23	23	31
24	20	1	24	11	15	24	0	22	24	11	45	24	20	37	24	23	30
25	19	48	25	10	54	25	0	46	25	12	6	25	20	49	25	23	29
26	19	35	26	10	33	26	1	9	26	12	27	26	21	1	26	23	27
27	19	22	27	10	12	27	1	33	27	12	47	27	21	12	27	23	24
28	19	8	28	9	51	28	1	56	28	13	7	28	21	23	28	23	21
29	18	54	29	9	30	29	2	20	29	13	28	29	21	34	29	23	18
30	18	39	30	9	9	30	2	43	30	13	48	30	21	44	30	23	14
31	18	25	31	8	47				31	14	8				31	23	10

CHAP.

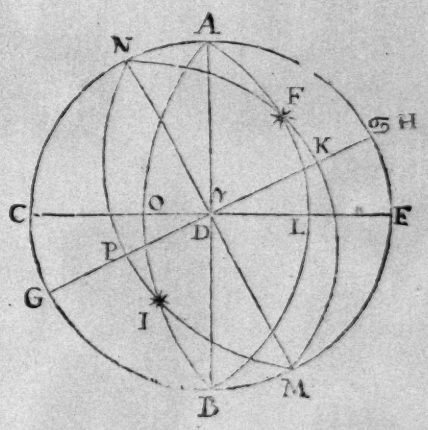
CHAP. XII.

Of the Longitude and Latitude of the fixed Starres.

THe Starres of the eighth Heauen, are called fixed Starres, becauſe that they (vnlike to the Plannets without motion) doe alwayes remaine faſt and fixed in one forme and diſtance one from the other, and are alike carried about together one with the other by the Primum mobile, and are calculated according to Longitude and Latitude. There Longitude is a part of the Eclipticke, contained between two halfe Circles, paſſing both out of the Poles of the Eclipticke, the one through the Equinoctium of the Spring, or begining of Aries, the other through the Starres themſelues. Their Latitude is an arch of ſuch a halfe Circle between the Eclipticke Line and the Starres. This is two-fold, Northerly and Southerly: Northerly which ſtandeth Northwards from the Ecliptick, and Southerly which ſtandeth to the Southwards from it.

A declaration.

Let G D H be the Eclipticke Line, N the North and M the South Poles of the ſame: F a certaine Starre. Let there be two halfe Circles drawne out of the foreſaid Poles, the one N D M through the Equinoctium of the Spring at D, the other through the Starre F, cutting the Eclipticke in K. The part of the Eclipticke D K is the Longitude of that Starre, and the arch or part of the ſame halfe Circle K F his Latitude Northwards, becauſe that he ſtandeth to the Northwards of the Eclipticke, and P I the Latitude of the Starre at I, becauſe that he ſtandeth to the Southwards of the Eclipticke.



CHAP. XIII.

Of the right Aſcention and Declination of the fixed Starres.

THe right aſcention of the Starres, is a part of the Equinoctiall, contained betweene two halfe Circles, paſſing both out of the Poles of the World, the one through the Equinoctium of the Spring, the other through the Starres themſelues. Their Declination an arch of ſuch a halfe Circle betweene the Equinoctiall and the ſame Starre, which is alſo of two ſorts, Northerly which ſtand by North the Line, & Southerly, which ſtand to the Southwards of it.

A declaration.

In the former Figure let C D E be the Equinoctiall Line, A the North, and B the South Pole of the World, F a certaine Starre: drawne out of the foreſaid Poles two halfe Circles, the one A D B through the Equinoctium or begining of Aries, the other through F the Starre, which cutteth the Equinoctiall in L. The part of the Equinoctiall L D is the right aſcention of ſuch a Starre, and the arch or part of the ſame Circle L F, his declination Northward, or O I of the Starre at I Southwards.

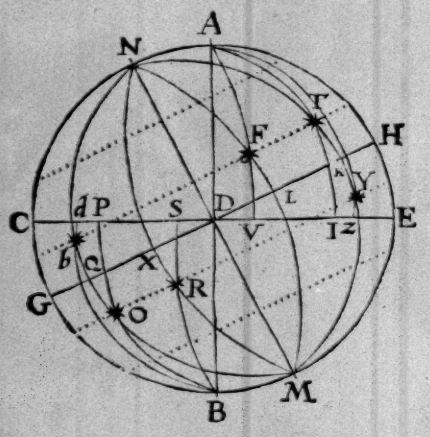
CHAP. XIIII.

Of the Mutation or change of the Declination of the fixed Starres.

LIke as the Starrie Heauen is carried about in our ſight euerie twentie and foure houres, by the Primum mobile, vpon the Axeltrees Points or Poles of the World, from the Eaſt to the Weſt, euen ſo it is carried about once in 25400 yeeres, vpon the Poles of the Eclipticke, contrariwiſe from Weſt to Eaſt, like as the Sunne once in the yeere.

yeere. Thereby the Longitude of the Starres doth alter euerie hundred yeeres one Degree 25 Minutes, or euerie twentie yeeres 17 Minutes; but their Latitude that is the diſtance from the Eclipticke remaineth vnchangeable alwayes the ſame. By the foreſaid alteration of the Longitude, the declination alſo altereth in proceſſe of time, of the one more and alſo ſwifter then of another. Some deminiſh and ſome encreaſe. Some hauing Northerly declination, come to haue Southerly declination; and ſome hauing Southerly declination come contrariwiſe to haue Northerly.

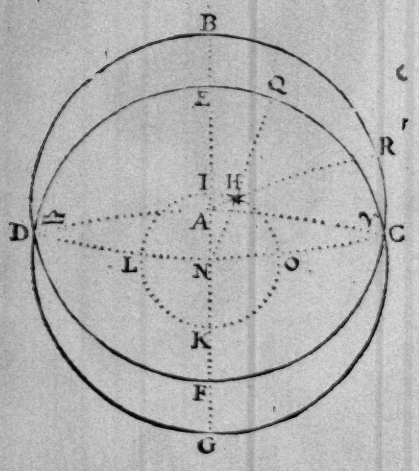
A declaration.



Let C D E be the Equinoctiall, A the North and B the South Pole of the World, G D H the Eclipticke Line, N M the Poles of the ſame, G the begining of Capricornus, D of Aries and H the end of Gemini or begining of Cancer. Let (as here before) the Starre at F his Longitude be in the Eclipticke at L, his Latitude to the Northwards of it L F, his Northerne declination is then V F. If that foreſaid Starre after many yeeres doe alter in Longitude from F into T, paralell with D H, his Latitude remaines K T euen to the former F L, but his declination I T is greater then V F the firſt, becauſe being paralell with D H he is declined more from the Equinoctiall Line. The Starre at O, whoſe Longitude in the Eclipticke is at Q, and his Latitude Q O hath Southerly decilnation P O, but altering in Longitude from O into R paralell with Q X, his Latitude remaineth X R euen to Q O, but his Southerly declination R S is leſſe then O P, becauſe that being in the paralell with G D, he is come neerer to the Equinoctiall. If the ſame Starre come to alter in length into Y, his declination ſhall be Y Z to the Northwards of the Line. This hath beene ſaid of the ſixe firſt Signes ♑ ♒ ♓ ♈ ♉ ♊.

In the ſame manner it is alſo on the contrarie ſide in the other ſixe Signes ♋ ♌ ♍ ♎ ♏ and ♐ thus: In the ſame Figure let H be the begining of Cancer, D Libra, and G the end of Sagitarius. If a Starre at T hauing Northerly declination T I, doe alter in Longitude into F, his declination F V is leſſe then T I, becauſe he is come neerer the Equinoctiall, but if the ſame doe alter in Longitude vnto *b*, his declination that was firſt Northerly, ſhall then be Southerly from *b* vnto *d*.

By the foreſaid motion of the eighth Heauen, is the declination of the North Starre alſo altered, which doth now euerie yeere waxe greater, that is, it declineth the longer the more from the Equinoctiall, and commeth neerer the Pole, the which ſhall continue to the yeere of our Lord 2091, then he ſhall be at the neereſt of the Pole, and no more then ſixe and twentie Minutes and a halfe diſtant from it, and after that time againe by little and little decline from it, ſo that 12700 yeeres after that, he ſhall ſtand from the Pole 47 Degrees 56 Minutes. How this is done, may plainly appeare by this Figure.



Let A the North Pole of the World be in the middeſt of the Equinoctiall B D F C: N the Pole of the Eclipticke, in the middeſt of the Eclipticke E D G C: H the North Starre, his Latitude from the Eclipticke is Q H 66 Degrees 2 Minutes, and his diſtance from the Pole of the Zodiacke N H 23 Degrees 58 Minutes, which alwayes remaines and continues one & the ſame, euen as the Latitude and diſtance of all the fixed Starres from the Pole of the Zodiacke, as hath beene before ſaid, his Longitude from the Equinoctium of the Spring or begining of Aries for the yeere 1625 is C Q 83 Degrees 24 Minutes.

Let there be a Circle drawne out of N the Pole of the Eclipticke, as I L K O H, whoſe halfe Diameter is N H 23 Degrees 58 Minutes, euen to the diſtance of the North Starre from the Pole of the Zodiacke, within the ſame is the Pole of the World A included, as being leſſe diſtant from the Pole of the Zodiacke then the North Starre. Vpon ſuch a Circle doth the North Starre keepe his courſe about the Pole of the Zodiacke (as all the fixed Starres doe) in 25400 yeeres; his diſtance from the Pole of the World is for the yeere 1625 A H 2 Degrees 42 Minutes, and ſhall be come in the yeere of our Lord 2091 by the foreſaid motion from H into I at the neereſt to A the Pole of the World, and ſhall then ſtand from it no more then 26 ½ Minutes. Proceeding from I alongſt L into K, he ſhall then be diſtante from the Pole of the World A K 47 Degrees 56 Minutes.

Therefore

Therefore seeing that the Starres doe not alwayes keepe one kind of declination, we haue for the benefit of Seafaring-men prepared these three-fold Tables following. The first sheweth their declination for the yeere 1625, The second for the yeere 1635, And the third for the yeere 1645. Besides the declination, there is also added thereunto the complement of the declination, that is, how farre they stand distant from the Pole.

A Table of Declination of the most notable fixed Starres, together vvith their distance from the Pole,

In the yeeres, 1625, 1635, and 1645.

These here followving standing all to the Southvvards of the Equinoctiall Line, haue Southerly Declination.

	Anno 1625				Anno 1635				Anno 1645			
	Southerly declination		Distance from the South Pole		Southerly declination		Distance from the South Pole		Southerly declination		Distance from the South Pole	
	deg.	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*
The Northermost in the Whales Tayle —	10	53	79	7	10	50	79	10	10	46	79	14
The Southermost in the Whales Tayle —	20	4	69	56	20	1	69	59	19	57	70	3
The left Foot of Orion. *Regel.* — —	8	41	81	19	8	40	81	20	8	39	81	21
The first of the three in the Girdle of Orion	0	37	89	23	0	36	89	24	0	36	89	24
The second in the Girdle — — —	1	28	88	32	1	27	88	33	1	27	88	33
The third — — — — —	2	11	87	49	2	10	87	50	2	10	87	50
The great Dogge. *Syrius.* — — —	16	12	73	48	16	12	73	48	16	13	73	47
The Heart of the Water-Serpent Hydra —	7	3	82	57	7	5	82	55	7	8	82	52
The Virgines Spike. *Spica Virginis.* — —	9	9	80	51	9	12	80	48	9	15	80	45
The South Ballance — — — —	14	25	75	35	14	28	75	32	14	30	75	30
The North Ballance — — — —	7	56	72	4	7	58	82	2	8	1	81	59
The Northermost and foremost in the left Hand of the Serpent-bearer *Ophiuchus* —	2	42	87	18	2	44	87	16	2	46	87	14
The left Knee of *Ophiuchus* — — —	9	43	80	17	9	44	80	16	9	46	80	14
The right knee of the Serpent-bearer —	15	10	74	50	15	11	74	49	15	12	74	48
The Heart of the Scorpion, *Antares.* — —	25	30	64	30	25	32	64	28	25	33	64	27
The Northermost of the two in the Hornes of Capricornus — — — —	13	36	76	24	13	34	76	26	13	33	76	27
The Southermost of the same two — —	15	53	74	7	15	51	74	9	15	50	74	10
The foremost or Westermost of the two Lights in the Tayle of Capricornus —	18	15	71	45	18	12	71	48	18	10	71	50
The second or Eastermost — — —	17	44	72	16	17	41	72	19	17	39	72	21
The left Shoulder of Aquarius — —	7	9	82	51	7	6	82	54	7	4	82	56
The right Shoulder of Aquarius — —	2	6	87	54	2	3	87	57	2	0	88	0
The outermost in the Streame of Aquarius called *Fomahant* — — — —	31	31	58	29	31	28	58	32	31	25	58	35

Theſe followving ſtanding all by North the Equinoctiall Line, *haue Northerly Declination.*

	Anno 1625				Anno 1635				Anno 1645			
	Northerly declination		Diſtance from the NorthPole		Northerly declination		Diſtance from the NorthPole		Northerly declination		Diſtance from the NorthPole	
	deg.	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*
The North Starre, *Alrucuba* — —	87	18	2	42	87	21	2	39	87	25	2	35
The middlemoſt or brighteſt of the Guardes	75	46	14	14	75	43	14	17	75	40	14	20
The Breaſt of Caſſiopea, *Schedir* — —	54	30	35	30	54	33	35	27	54	37	35	23
The Hip of Caſſiopea — — — —	58	42	31	18	58	45	31	15	58	49	31	11
The Knee of Caſſiopea — — —	58	15	31	45	58	18	31	42	58	22	31	38
The brighteſt in the Chaire of Caſſiopea —	57	6	32	54	57	9	32	51	57	13	32	47
The Head of Andromeda — — —	27	2	62	58	27	5	62	55	27	9	62	51
The Girdle of Andromeda — — —	33	40	56	20	33	43	56	17	33	47	56	13
The Southermoſt Foot of Andromeda —	40	30	49	30	40	33	49	27	40	36	49	24
The brighteſt in the Head of the Ramme —	21	40	68	20	21	43	68	17	21	46	68	14
The brighteſt in the Mouth of the Whale, *Menkar* — — — — — —	2	35	87	25	2	37	87	23	2	40	87	20
The brighteſt in the Head of Meduſa —	39	28	50	32	39	30	50	30	39	33	50	27
The brighteſt in Perſeus Side — —	48	27	41	33	48	29	41	31	48	31	41	29
The Souther Eye of the Bull, *Aldebaran* —	15	45	74	15	15	46	74	14	15	48	74	12
The North Horne of the Bull — —	28	14	61	46	28	15	61	45	28	16	61	44
The South Horne of the Bull — —	20	53	69	7	20	53	69	7	20	54	69	6
The left Shoulder of Orion — — —	5	57	84	3	5	58	84	2	5	59	84	1
The right Shoulder of Orion — —	7	17	82	43	7	17	82	43	7	18	82	42
Hircus the Goat vpon the left ſhoulder of the Waggener Erichtonius, called *Capella* —	45	33	44	27	45	34	44	26	45	35	44	25
The right Shoulder of Erichtonius — —	44	51	45	9	44	51	45	9	44	52	45	8
The brighteſt in the Feet of the Twinnes —	16	40	73	20	16	40	73	20	16	40	73	20
The Head of the Northermoſt Twin Caſtor	32	38	57	22	32	37	57	23	32	36	57	24
The Head of the Southermoſt Twin Pollux	28	52	61	8	28	51	61	9	28	50	61	10
The little Dogge *Procyon* — — —	6	9	83	51	6	8	83	52	6	7	83	53
The Heart of the Lyon *Regulus, Baſiliſcus* —	13	46	76	14	13	43	76	17	13	40	76	20
The middlemoſt and brighteſt in the Necke of the Lyon — — — —	21	43	68	17	21	40	68	20	21	37	68	23
The brighteſt in the Backe of the Lyon —	22	35	67	25	22	33	67	27	22	28	67	32
The Lyons Tayle — — — —	16	40	73	20	16	36	73	24	16	33	73	27
The Northermoſt hinder Wheele of Charles Waine, or the Northermoſt of the Pointers called *Dubhe* — — — —	63	46	26	14	63	43	26	17	63	40	26	20
The Southermoſt hinder Wheele of Charles Waine, or the Southermoſt of the Pointers	58	23	31	37	58	20	31	40	58	17	31	43
The Northermoſt Fore-wheele of the Waggon — — — — — —	59	7	30	53	59	4	30	56	59	0	31	0
The Southermoſt Fore-wheele of the Waggon — — — — — —	55	48	34	12	55	45	34	15	55	41	34	19

	Anno 1625				Anno 1635				Anno 1645			
	Northerly declination		Distance from the NorthPole		Northerly declination		Distance from the NorthPole		Northerly declination		Distance from the NorthPole	
	deg.	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*	*deg.*	*mi.*
The next Horſe to the waggon —	58	2	31	58	57	59	32	1	57	56	32	4
The middlemoſt horſe —	56	55	33	5	56	52	33	8	56	49	33	11
The outermoſt horſe. — —	51	14	38	46	51	11	38	49	51	8	38	52
The Norther Winge of Virgo *Vindemiatrix* — — —	13	0	77	0	12	57	77	3	12	54	77	6
The Girdle of Virgo — —	5	29	84	31	5	26	84	34	5	22	84	38
The left ſhoulder of Bootes —	39	56	50	4	39	53	50	7	39	50	50	10
The bright ſtarre betweene the thighes of Bootes *Arcturus* —	21	11	68	49	21	8	68	52	21	5	68	55
The brighteſt in the norther Crowne	28	1	61	59	27	59	62	1	27	57	62	3
The brighteſt in the neck of the Serpent *Ophiuchus*	7	41	82	19	7	39	82	21	7	37	82	23
Hercules Head — —	14	53	75	7	14	52	75	8	14	51	75	9
The Serpent bearers Head — —	12	54	77	6	12	53	77	7	12	52	77	8
The brighteſt in the Dragons head —	51	37	38	23	51	37	38	23	51	37	38	23
Lyra — — —	38	29	51	31	38	29	51	31	38	30	51	30
The Eagles tayle — — —	13	22	76	38	13	23	76	37	13	24	76	36
The middlemoſt and the brighteſt in the Eagle *Vultur* — —	7	57	82	3	7	58	82	2	8	0	82	0
The Swans breaſt — —	39	5	50	55	39	7	51	53	39	9	50	51
The Swans tayle — —	43	59	46	1	44	1	45	59	44	3	45	57
The Girdle of *Cepheus* — —	68	56	21	4	68	58	21	2	69	1	20	59
The ſtarre in the mouth of the Horſe *Pegaſus* — —	8	11	81	49	8	13	81	47	8	16	81	44
The bright ſtarre on the legge of Pegaſus *Scheat* — — —	26	4	63	56	26	7	63	53	26	10	73	50
The ſhaft of Pegaſus *Marcab* —	13	13	76	47	13	16	76	44	13	19	76	41
The outermoſt in the Wing of Pegaſus	13	6	76	54	13	9	76	51	13	13	76	47

By theſe Tables men may finde the Declinations of the ſame Starres, in all other yeres falling betwixte theſe, if they proportion the difference of the Declination according to the difference of the tyme.

1. Example.

I deſire to knowe the Declination of the Lyons Tayle in the yeare 1630. I finde in the table for the yeare 1625 16 degrees 40 minutes, & for the yeare 1635, 16 degrees 36 minutes, the numbers being devided at halfs, according as the yeares, I finde 16 degrees 38 minutes, decreaſing declynation.

2. Example.

I deſire to know the Declination of Aldebaran the Bulles eye in the yeare 1640. I finde in the table for the yeare 1635, 15 degrees 46 minutes, for the yeare 1645, 15 degrees 48 minutes, the numbers being devided at halfes as the yeares, I finde 15 degrees 47 minutes encreaſing declynation.

CHAP.

CHAP. XV.

Of the Horizon and Zenith.

THE Horizon or Sight-ender (ſo called, becauſe our ſight doth ende at it) is a greate circle, deviding the Spheare into two equall parts, whereof wee ſee the one aboue, the other is ſuncken under it out of our ſight.

Zenith is the pointe of the Heauen right over our heads, everie where alike diſtant from the Horizon, and is alſo called the Pole of the Horizon.

The eye being elevated aboue the water, foote.	The viſible horizon is lower then the true. minutes.
2	1
4	2
8	3
14	4
20	5
27	6
37	7
39	8
53	9
67	10
82	11
100	12
140	13
163	14
186	15

A declaration.

The Horizon is conſidered two manner of waies, according to the true and viſible Horizon. The true Horizon goeth right levell with the water everie waie from our ſight, or through the center of the Spheare, deviding the ſame into two equall parts, is everie where diſtant from the Zenith 90 degrees, the juſt fourth part of a circle

The Viſible is the uttermoſt parte of the earth or water, that we can ſee with our eyes, which doeth not extende farther from us then four or fiue leagues. When that our eye is euen with the ſuperficiall part of the water, the true Horizon and the viſible are then one, without any difference: but our eyes being elevated from it, the ſight falleth over the roundnes of the Earth or Water all aboute lower then levell, and conſequently the viſible Horizon lower then the true. Although this doth amounte to little in the uſe of Navigation, (when it is partly remedied by the refraction of the viſible Horizon) we haue notwithſtanding for the ſatisfaction of the curious hereto added this little table, wherein it doeth appeare, how much the Viſible Horizon is lower then the True, upon ſeverall heights of feete.

Example.

The ſight being elevated aboue the Superficiall parte of the water 14 foote in the firſt columne, right againſt it ſtandeth 4 minutes, that the Viſible Horizon is lower then the True: the ſight being elevated 140 foote, the Viſible Horizon is lower then the True 13 minutes.

CHAP. XVI.

Of the Meridian.

THE Meridian is a greate Circle paſſing through both the Poles of the world through the Zenith, croſſing on both ſides through the Equinoctiall, and right in the South and North through the Horizon.

The declaration.

The Meridian or Middayes Circle hath his name of *Meridies*, that is, Midday, becauſe that the Sunne comming in the ſouth to this Circle maketh Midday or High noone. All the Celeſtiall Lights aſcending and comming to this Circle, are at their higheſt elevated from the Horiſon, which paſſing through, they beginne againe to deſcend.

If men doe travaile, or ſayle right northward or ſouthward, they doe alwaies remaine under one and the ſame Meridian, but if they goe eaſtwards or weſtwards, they get continually alwaies an other Meridian.

CHAP.

CHAP. XVII.

Of the deuiſion of the Earth according to Longitude and Latitude.

THE places upon the Earth are deuided and reckoned according to Longitude and Latitude.

The Longitude of any place whatſoeuer is a part of the Equinoctiall Lyne (or any other parallel) contayned betweene two Meridians, whereof the one paſſeth through the beginning of Longitude, (ouer the *Canaries* Ilands) and the other through the place it ſelf.

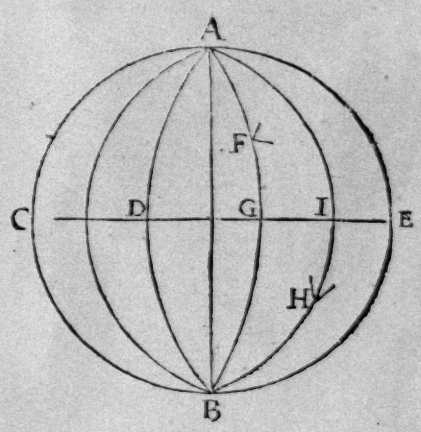
The Latitude is the parte of one Meridian betwixt the Equinoctiall Line and the place, which is of two manner of wayes, to weete northerly and ſoutherly.

A declaration.

Vpon the Earth (according to the ſimilitude of the celeſtall Spheare) is alſo imagined two Poles with a middle Lyne, to wete two points upon the Earth, right under the poles of the world, common with the axeltree of the world, and a Line in the middeſt betweene theſe two points, right under the celeſtiall Equinoctiall Lyne. Along this middle Line men doe counte the Longitude of lands, from weſt to eaſt, beginning at a Meridian or South and North Lyne, paſſing over the Pike of Teneriffe (one of the Canarie Ilands) to 360 degrees. The Latitude is counted from the Middle Lyne northwardes and ſouthwards, towards both the Poles to 90 degrees. This ſhall more evidently be apprehended by ſuch an

Example.

In this figure of the Earth let A be the North and B the South Pole, C D E the Middle Lyne, A D B the Meridian, paſſing out of both the Poles, over the Pike of Teneriffe, as the beginning of Longitude F the C. S. Vincent in Spaigne, over which let there be drawne the Meridian A F G B: the part of the Equinoctial D G betweene theſe two Meridians is the Longitude of the C. S. Vincent 23 degrees 40 minutes, and the arch G F the part of the Meridian betweene the Lyne and the foreſaid Cape is the Northerne Latitude 37 degrees, becauſe that the foreſaid Cape is ſo farre diſtant from the Middle Lyne towards the north.



II. Example.

Let H be the Cape of Bona Eſperance, the ſouthermoſt point of Afrika, and let the Meridian A I H B be drawne over it. The part of the Equinoctiall D I is the Longitude of the foreſaid Cape, and H I the part of the Meridian betweene the Line and the Cape, the ſoutherne Latitude 34 ½ degrees, becauſe the Cape lyeth ſo farre to the ſouthwards of the Lyne. And ſo of all other Lands and places.

CHAP. XVIII.

Of the difference betweene the common flat Seacardes and the round or Terreſtiall Globe.

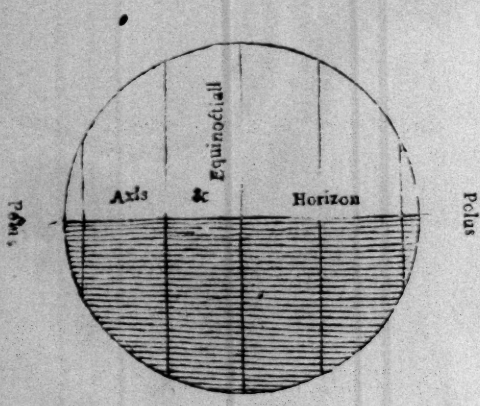
IN the common Seacardes the Seacoaſtes and points of Lands are drawn according to their courſes & diſtances from the one to the other, as alſo according to their Latitudes: but becauſe of the unlikenes which they haue, (by their flat form) with the roundnes of the Earth, it is not poſſible, to place them all ſo exactly according to their right Longitude. All Meridians or Lynes from ſouth & north upon the terreſtial Globe how far ſoeuer they ſtand upon the Middle Line, one from the other, extending northwards or ſouthwards, come at the end of 90 degrees of the Line, together into one point; but upon the flat Seacardes, whether ſuch Meridians do ſtand near or far one from the other, they neuer come neare one another, but remaine alwaies alike farre aſunder. Likewiſe with all the points, except onely thoſe of eaſt and weſt.

CHAP. XIX.

Of the differences or formes of the Spheare.

THE Spheare is conſidered after three kindes. 1 in *Sphera recta*, 2 *Parallela*, & 3 *Obliqua*. that is, Right, Parallelwiſe, and Oblique Spheare.

Sphera Recta.

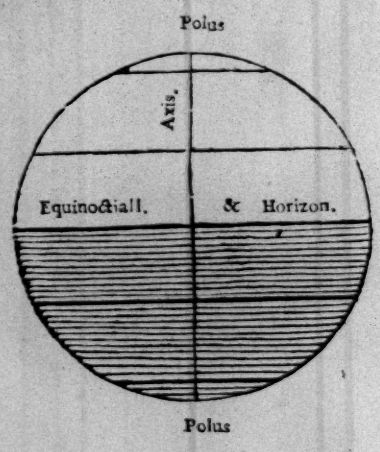


A declaration.

1 *Sphera Recta*, or Right Spheare, is ſo called, becauſe that when the Poles of the World lye at the Horizon, and the Equinoctiall is one with the Zenith, as is shewed in this Figure, all the Celeſtiall Lights, either Sunne, Moone, or Starres (whether they ſtand neere vnto, or far diſtant from the Equinoctiall or Pole) ariſe right vp from the Horizon, and goe right downe vnder it. All the Stars that come vp together, goe together one with another through the Meridian, and alſo together vnder. And in ſo much all the Circles, which the Sun, Moone, or Starres doe deſcribe by their daily courſe about, are of the Horizon deuided into two equall parts. The foreſaid Lights are alſo iuſt twelue houres aboue and twelue houres vnder the Horizon: the day and night are alwayes in that place of one length without change.

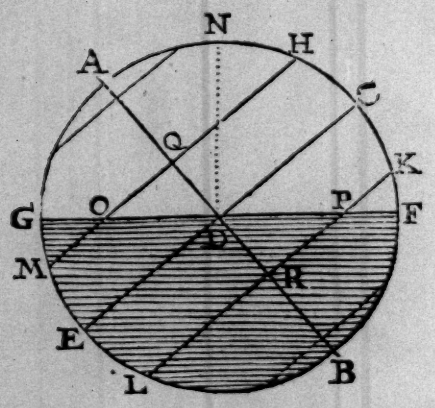
This happens vnto thoſe that inhabite right vnder the Equinoctiall Line without any Latitude, as in S. Thome, ſome of the Moluckas, and ſuch like Lands where neither of both the Poles are eleuated aboue the Horizon.

Sphera Parallela.



2 *Sphera Parallela*, or equally diſtant Spheare, is ſo called, becauſe that when the Axeltree of the World ſtandeth right vp and downe, & the one Pole in the Zenith, the Equinoctiall lyeth then euen plaine with the Horizon, as is shewed in this Figure. At that place of the Terreſtiall Globe where is ſuch ſcituation of the Spheare, all the Stars of the Firmament are by the daily motion caried about Paralell-wiſe or equally diſtant with the Horizon. All that are aboue the Horizon, remaine continually aboue it without going vnder, and all thoſe that are vnder it, remaine continually vnder it without riſing. From whence it followeth (that whereas the one halfe of the Eclipticke remaineth alwaies aboue the Horizon, and the other halfe vnder it) that the Sun, being in that part of the Eclipticke which remaineth aboue the Horizon, alſo doth not Set nor goe vnder, but maketh one day of ſixe months. On the contrary, being in that part vnder the Horizon, commeth not vp, but contrariwiſe maketh alſo one night of ſixe months.

Sphera Obliqua.



3 *Sphera Obliqua*, or crooked Spheare, is ſo called, becauſe that neither the Axeltree of the World, nor the Equinoctiall doe neither lye flat downe, nor ſtand right vp from the Horizon, but enclined ſloping. Whence it is that all the Celeſtiall Lights doe not riſe nor goe right vp from the Horizon, nor equally diſtant alongſt by it, but ariſe vp ſloping, & ſo deſcend againe. Alſo that ſome Stars about the Pole Eleuated, doe alwayes remaine aboue, and to the contrarie, others about the hidden Pole do neuer riſe, and ſome others doe make vnequall & vnlike riſing and ſetting. Thoſe that ſtand from the Equinoctiall towards the Pole Eleuated, are more then 12 houres aboue the Horizon, and thoſe that ſtand towards the hidden Pole, leſſe then 12 houres aboue the Horizon. Likewiſe thus it is with the Sun. From whence it followeth, that they that inhabite ſuch a Spheare haue the daies and nights vnequall, ſometimes long, and ſometimes on the contrary short. How much the higher the one Pole is Eleuated aboue the Horizon, ſo much the more is the vnequallitie of the dayes and nights, as alſo the riſing and ſetting of the Stars is more vnequall in regard the Circles which they deſcribe in their courſe about are cut in more vnequallitie from the Horizon.

Example.

Let F D G be the Horizon, C D E the Equinoctial, B D A the Axeltree of the World, not right vp to the Zenith N, nor euen with the Horizon F D G, but the one Pole eleuated aboue the ſame, as from G to A, the other ſunke vnder it from F to B. The Equinoctiall likewiſe crooked or Byas-wiſe with all Paralels vpon the Horizon. Let the Sun be at the Tropicke of Cancer H Q M at midnight at the loweſt vnder the Horizon at M: Seeing he goeth in 12 houres from midnight to midday from M to H, he goeth the halfe from M to Q in ſixe houres, and therfore in leſſe then ſixe houres from M to O at the Horizon where he riſeth, and in more then ſixe houres from Q to H: the halfe day ſhall then be longer, and the halfe night ſhorter then ſixe houres. To the contrarie, let the Sun be at the Tropicke of Capricornus at midnight at L he ſhall then goe from L to R in ſixe houres and in more then ſixe houres vnto P to the Horizon where he riſeth, and conſequently in leſſe then ſixe houres from P to K to the midday, ſo that the halfe day is ſhorter, and the halfe night longer then ſixe houres.

CHAP.

CHAP. XX.

Of the Altitude or heighth of the Poles aboue the Horizon.

THe Altitude of the Pole, is alwayes euen to the Latitude of the Lands.

A declaration.

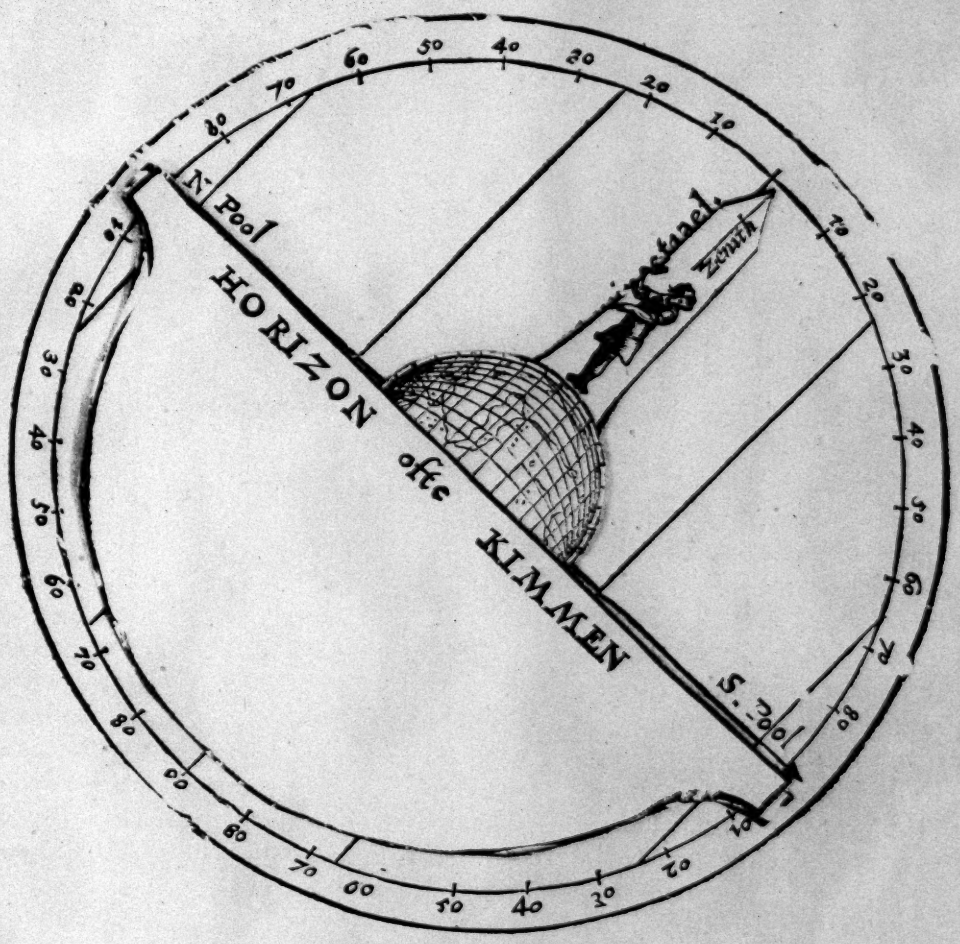
By the Altitude of the Pole (which by many is called the heighth of Lands) is vnderstood the Eleuation of the Pole aboue the Horizon, that is, how many Degrees there is betweene the Horizon and the Pole. In the right Spheare the Poles lye without any Eleuation in the Horizon. In the Paralell Spheare it is Eleuated from the Horizon at the higheſt ninetie Degrees. In the Oblique or Byas-wiſe Spheare, the Eleuation is different from one, tenne, twentie, fortie, fiftie Degrees more or leſſe.

A man being vpon the Globe of the Earth right vnder the Equinoctiall Line, hath both the Poles, the one in the North, the other in the South, at the Horizon without any Eleuation, and then he ſtandeth alſo right vpon the middle Line of the Globe of the Earth without any Latitude.

If he remoue from the middle Line towards the North or South, the one Pole ſhall then riſe vp out of the Horizon, and the other ſinke vnder the ſame.

Goeth he aſide from the middle Line of the Earth tenne, twentie, or more Degrees in Latitude Northwards, the North Pole ſhall alſo be Eleuated tenne, twentie, or more Degrees: The South Pole to the contrarie ſhall ſinke ſo much vnder the Horizon, and the Equinoctiall Line ſhall be altered iuſt ſo much Southward from the Zenith.

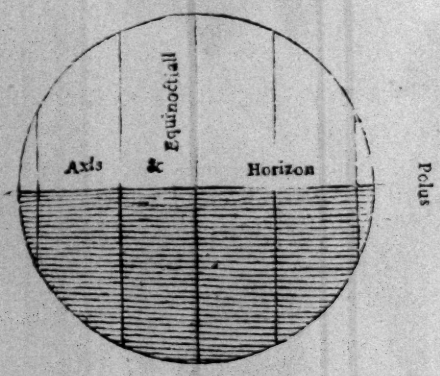
The contrarie happeneth, If a man remoue off from the middle Line Southwards. All which appeareth more euidently by this Figure following.



Example.

Bring both the Poles to the Horizon without Eleuation, the Equinoctiall Line commeth then right to the Zenith, and the little man ſhall ſtand vpon the Globe of the Earth, right vpon the middle Line of the Earth, without any Latitude. If we remoue the little man vpon the Globe of the Earth from the middle Line towards the North 10 Degrees, the Equinoctiall remoueth 10 degrees Southward from the Zenith, the North Pole is eleuated 10 degrees aboue the Horizon, and the South Pole deſcendeth 10 degrees vnder it.

Sphera Recta.

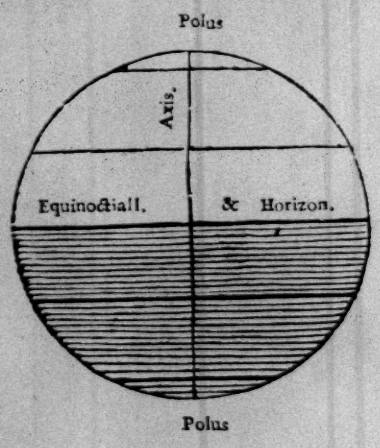


A declaration.

1 *Sphera Recta*, or Right Spheare, is ſo called, becauſe that when the Poles of the World lye at the Horizon, and the Equinoctiall is one with the Zenith, as is shewed in this Figure, all the Celeſtiall Lights, either Sunne, Moone, or Starres (whether they ſtand neere vnto, or far diſtant from the Equinoctiall or Pole) arriſe right vp from the Horizon, and goe right downe vnder it. All the Stars that come vp together, goe together one with another through the Meridian, and alſo together vnder. And in ſo much all the Circles, which the Sun, Moone, or Starres doe deſcribe by their daily courſe about, are of the Horizon deuided into two equall parts. The foreſaid Lights are alſo iuſt twelue houres aboue and twelue houres vnder the Horizon: the day and night are alwayes in that place of one length without change.

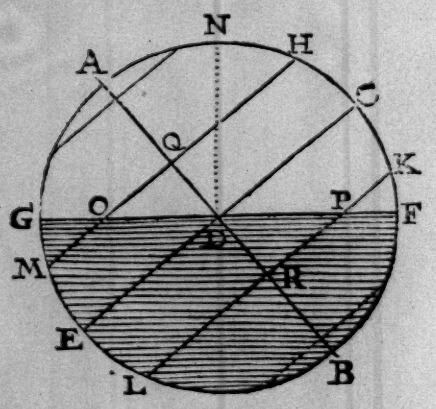
This happens vnto thoſe that inhabite right vnder the Equinoctiall Line without any Latitude, as in S. Thome, ſome of the Moluckas, and ſuch like Lands where neither of both the Poles are eleuated aboue the Horizon.

Sphera Parallela.



2 *Sphera Parallela*, or equally diſtant Spheare, is ſo called, becauſe that when the Axeltree of the World ſtandeth right vp and downe, & the one Pole in the Zenith, the Equinoctiall lyeth then euen plaine with the Horizon, as is shewed in this Figure. At that place of the Terreſtiall Globe where is ſuch ſcituation of the Spheare, all the Stars of the Firmament are by the daily motion caried about Paralell-wiſe or equally diſtant with the Horizon. All that are aboue the Horizon, remaine continually aboue it without going vnder, and all thoſe that are vnder it, remaine continually vnder it without riſing. From whence it followeth (that whereas the one halfe of the Eclipticke remaineth alwaies aboue the Horizon, and the other halfe vnder it) that the Sun, being in that part of the Eclipticke which remaineth aboue the Horizon, alſo doth not Set nor goe vnder, but maketh one day of ſixe months. On the contrary, being in that part vnder the Horizon, commeth not vp, but contrariwiſe maketh alſo one night of ſixe months.

Sphera Obliqua.



3 *Sphera Obliqua*, or crooked Spheare, is ſo called, becauſe that neither the Axeltree of the World, nor the Equinoctiall doe neither lye flat downe, nor ſtand right vp from the Horizon, but enclined ſloping. Whence it is that all the Celeſtiall Lights doe not riſe nor goe right vp from the Horizon, nor equally diſtant alongſt by it, but ariſe vp ſloping, & ſo deſcend againe. Alſo that ſome Stars about the Pole Eleuated, doe alwayes remaine aboue, and to the contrarie, others about the hidden Pole do neuer riſe, and ſome others doe make vnequall & vnlike riſing and ſetting. Thoſe that ſtand from the Equinoctiall towards the Pole Eleuated, are more then 12 houres aboue the Horizon, and thoſe that ſtand towards the hidden Pole, leſſe then 12 houres aboue the Horizon. Likewiſe thus it is with the Sun. From whence it followeth, that they that inhabite ſuch a Spheare haue the daies and nights vnequall, ſometimes long, and ſometimes on the contrary short. How much the higher the one Pole is Eleuated aboue the Horizon, ſo much the more is the vnequallitie of the dayes and nights, as alſo the riſing and ſetting of the Stars is more vnequall in regard the Circles which they deſcribe in their courſe about are cut in more vnequallitie from the Horizon.

Example.

Let F D G be the Horizon, C D E the Equinoctial, B D A the Axeltree of the World, not right vp to the Zenith N, nor euen with the Horizon F D G, but the one Pole eleuated aboue the ſame, as from G to A, the other ſunke vnder it from F to B. The Equinoctiall likewiſe crooked or Byas-wiſe with all Paralels vpon the Horizon. Let the Sun be at the Tropicke of Cancer H Q M at midnight at the loweſt vnder the Horizon at M: Seeing he goeth in 12 houres from midnight to midday from M to H, he goeth the halfe from M to Q in ſixe houres, and therfore in leſſe then ſixe houres from M to O at the Horizon where he riſeth, and in more then ſixe houres from Q to H: the halfe day ſhall then be longer, and the halfe night shorter then ſixe houres. To the contrarie, let the Sun be at the Tropicke of Capricornus at midnight at L he ſhall then goe from L to R in ſixe houres and in more then ſixe houres vnto P to the Horizon where he riſeth, and conſequently in leſſe then ſixe houres from P to K to the midday, ſo that the halfe day is shorter, and the halfe night longer then ſixe houres.

CHAP.

CHAP. XX.

Of the Altitude or heighth of the Poles aboue the Horizon.

THe Altitude of the Pole, is alwayes euen to the Latitude of the Lands.

A declaration.

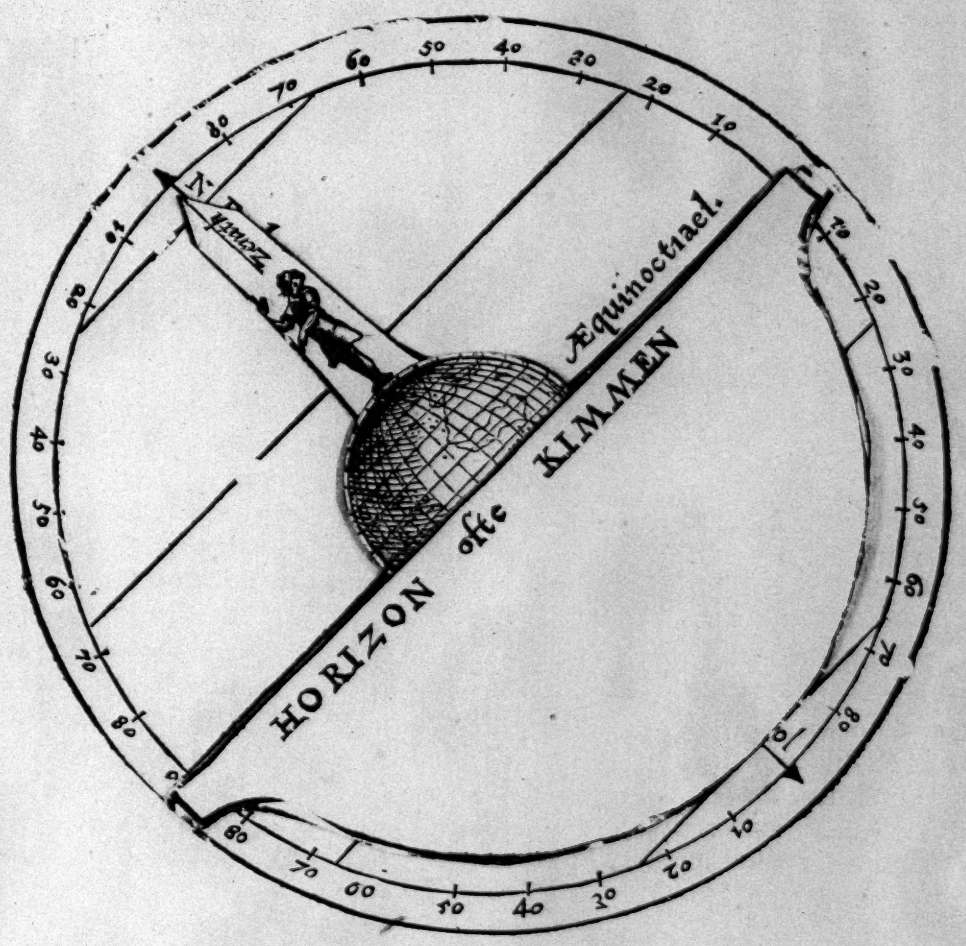
By the Altitude of the Pole (which by many is called the heighth of Lands) is vnderstood the Eleuation of the Pole aboue the Horizon, that is, how many Degrees there is betweene the Horizon and the Pole. In the right Spheare the Poles lye without any Eleuation in the Horizon. In the Paralell Spheare it is Eleuated from the Horizon at the higheſt ninetie Degrees. In the Oblique or Byas-wiſe Spheare, the Eleuation is different from one, tenne, twentie, fortie, fiftie Degrees more or leſſe.

A man being vpon the Globe of the Earth right vnder the Equinoctiall Line, hath both the Poles, the one in the North, the other in the South, at the Horizon without any Eleuation, and then he ſtandeth alſo right vpon the middle Line of the Globe of the Earth without any Latitude.

If he remoue from the middle Line towards the North or South, the one Pole shall then riſe vp out of the Horizon, and the other ſinke vnder the ſame.

Goeth he aſide from the middle Line of the Earth tenne, twentie, or more Degrees in Latitude Northwards, the North Pole shall alſo be Eleuated tenne, twentie, or more Degrees: The South Pole to the contrarie shall ſinke ſo much vnder the Horizon, and the Equinoctiall Line shall be altered iuſt ſo much Southward from the Zenith.

The contrarie happeneth, If a man remoue off from the middle Line Southwards. All which appeareth more euidently by this Figure following.



Example.

Bring both the Poles to the Horizon without Eleuation, the Equinoctiall Line commeth then right to the Zenith, and the little man shall ſtand vpon the Globe of the Earth, right vpon the middle Line of the Earth, without any Latitude. If we remoue the little man vpon the Globe of the Earth from the middle Line towards the North 10 Degrees, the Equinoctiall remoueth 10 degrees Southward from the Zenith, the North Pole is eleuated 10 degrees aboue the Horizon, and the South Pole deſcendeth 10 degrees vnder it.

CHAP. XXI.

Of the Altitude of the Equinoctiall.

THe Complement of the Altitude of the Equinoctiall, is alwayes iuſt to the Altitude of the Pole, and the Latitude of the Lands.

A declaration.

Out of the former Chapter it hath appeared, that as much as one of both the Poles arriſeth from the Horizon, the Equinoctiall Line is depreſſed iuſt ſo much off from the Zenith towards the Horizon. The ſpace then between the Equinoctiall and the Zenith (which is the Complement of the Equinoctials Altitude to 90) is iuſt to the Poles Altitude. To the contrarie, the ſpace betweene the Zenith and the Pole (which is the Complement of the Poles Altitude to 90) is alwayes iuſt to the Altitude of the Equinoctiall. Hence it followeth, If being vpon any place of the Earth, you doe know the Eleuation or height of the Pole aboue the Horizon, or the heighth of the Equinoctiall, and conſequently the Complement of the heighth, then you know alſo the Latitude of that place, that is, how farre you are from the middle Line vpon the Globe of the Earth, either Northwards or Southwards.

In ſo much as the Poles and Equinoctiall Line are inuiſible, and therefore it is impoſſible to obſerue their Altitudes from themſelues, men muſt come to the knowledge thereof by other viſible things, to wit by the Altitude or heighth of the Sunne, and of the Starres. Before that we proceede therein, we will deſcribe the making and vſe of ſome Inſtruments needfull thereto.

CHAP. XXII.

Of the making of the Croſſe-Staffe and Aſtrolabie.

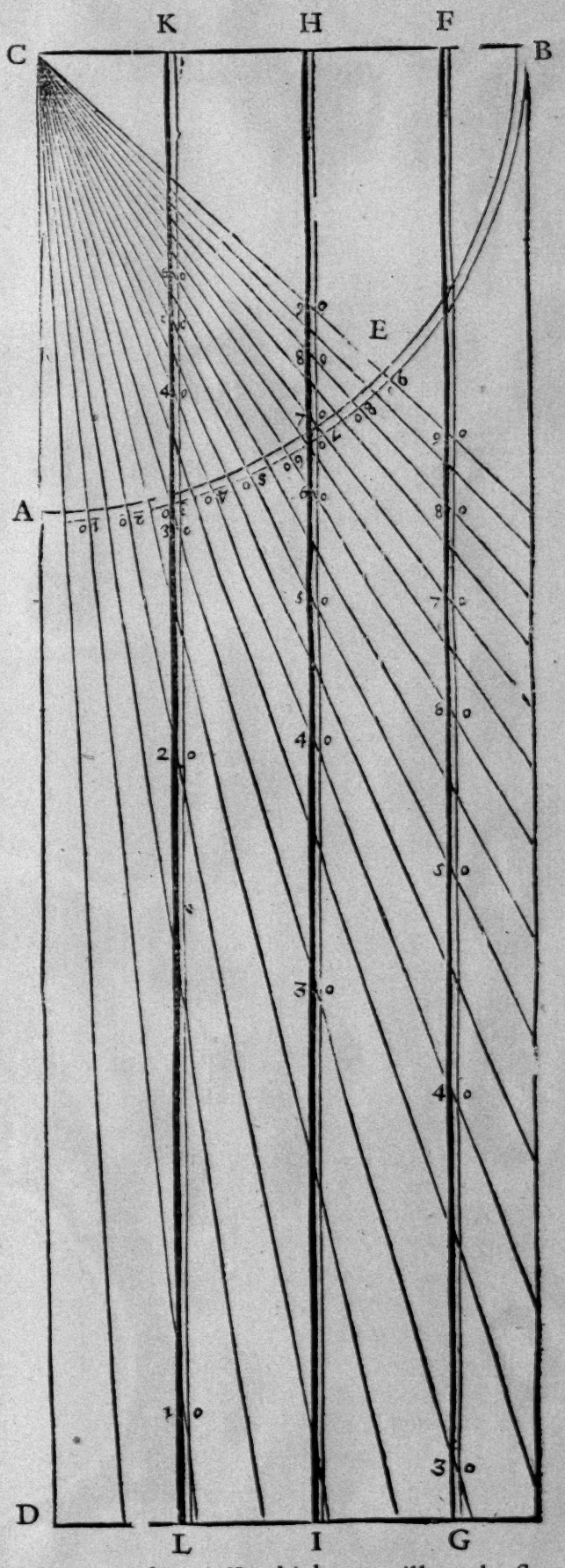
FOr to obſerue the Altitude or heighth of the Celeſtiall Lights aboue the Horizon, the Mathematicians haue inuented many kindes of Inſtruments, whereof there are two the fitteſt and moſt neceſſarie aboue all the reſt for to vſe at Sea; The Common Croſſe-Staffe and the Aſtrolabie.

It is not euerie mans worke to make and marke an Aſtrolabie for want of practice needfull thereunto, yet notwithſtanding it is neceſſarie that a Pilote, who is to haue the vſe of it, ſhould know that it is well made: For the tryall whereof, you may ſee firſt with a paire of Compaſſes whether the Degrees be well deuided. Secondly (hanging it to a Staffe or Corde) try with a ſmall Plummet and Line, whether the Line going downward from the Zenith or vpper part through the Center, doe hang right with the Plummet Line, as well as the Alhidada, Labell, or Pointer be turned right ouer the one ſide as ouer the other. Thirdly, when as the Alhidada or Pointer doeth ſtand with the point right vpward, whether then both the holes (where the Sunne muſt ſhine through) doe ſtand vnder and aboue on both ſides of like Degrees diſtant from the Zenith or Horizon, all which being exactly well found, then it is well made.

For to marke well a Croſſe-Staffe, you ſhall make a plaine flat Borde of good dry Wood, fifteene or ſixteene Inches broad, and about foure foot long, paeſt it well with good Paper, draw alongſt the one ſide a right Line, as in this Figure C A D, out of the Point C draw a ſquare Line vpon A C as C B, and out of C the Arch A E B a right quadrant or fourth part of a Circle, deuide that into two parts, the one half thereof, as A E, deuide into ninetie equall parts or Degrees thus: Firſt, into three parts, and each of the ſame againe into three, theſe parts each into two, and each of the laſt parts into fiue, the Arch A E ſhall then be deuided into ninetie parts. Then take a right Ruler, lay the one end vpon the point or Center C, the other vpon each point of the foreſaid ſeuerall deuiſions, and draw ſmall Lines out of C through each of the foreſaid points or Degrees in the Quadrant, ſo long as they can ſtand vpon the Borde, as is ſhewed in this Figure. Then take with the paire of Compaſſes iuſt the halfe length of the Croſſe, that you will marke the Staffe after, pricke it from the point C to B, as by example in F, and from D to G, draw theſe two points with a Line to one another, euen into ſuch parts as that Line is cut and deuided by the foreſaid Lines comming out of the Center of the Quadrant muſt your Staffe be marked. Whether the Croſſes be long or ſhort, the ſame manner is to be followed, as appeareth by the Lines H I and K L, which are drawne for Croſſes, the halfe whereof is ſo long as C H or C K.

If that foreſaid Quadrant by want of good skill or practice be not well deuided, or the Lines not well drawne, the Staues being marked thereafter will alſo be faulty.

They may be marked more exactly by points equally deuided, in manner as followeth: Prepare you a Staffe, and paeſt it with good ſtiffe Paper (or it ſhould be better layd with Copper) draw thereon a right Line ſo long as your Staffe, and take with a ſharpe paire of Compaſſes the halfe length of the Croſſe after which you deſire to marke your Staffe, prick it ſo often alongſt the foreſaid Line, as it can ſtand vpon the ſame, deuide each of theſe lengths of the halfe Croſſe into 10000 equall parts, then pricke vpon the Staffe which you will marke from the Center end off euen the halfe length of the Croſſe, and make there a ſmall thwart ſtrike off from thence, pricke for each Degree ſo many of the ſame parts as the halfe length of the Croſſe is deuided, like as is marked in the Table here anexed for euerie Degree.



Example,

Examp'e.

For the firſt degree you ſhall marke off from that foreſaid thwart ſtrike 176, for the third degree 538, for the tenth degree 1918 of thoſe parts, and ſo forth for all the reſt.

If you cannot deuide the halfe length of the croſſe into 10000, then deuide the whole croſſe ſo, and then take for each degree halfe ſo many points as the Table sheweth for it. And if you cannot yet doe that, then deuide the halfe croſſe into 1000, that is one o leſſe, leaue out in place thereof alſo the laſt Figures of the number of the parts in the Table, as for example, for the 15 degree in place of 3032 take 303, in place of 57 degree 2376. If in caſe your croſſe be ſo little that you cannot deuide into leſſe then 100, in ſuch caſe leaue out of the parts in the table, the two laſt Figures, and it ſhall ſatisfie your deſire.

The Degree Table.

d.	part.	d.	part.	d.	partes.	d.	partes	d.	partes.
1	176	19	4019	37	10057	55	21716	73	56912
2	355	20	4281	38	10503	56	22708	74	61154
3	538	21	4550	39	10965	57	23759	75	65958
4	724	22	4826	40	11445	58	24874	76	71445
5	913	23	5108	41	11943	59	26059	77	77769
6	1106	24	5399	42	12460	60	27321	78	85144
7	1303	35	5697	43	12998	61	28667	79	93854
8	1504	26	6003	44	13558	62	30108	80	104301
9	1708	27	6318	45	14142	63	31653	81	117062
10	1918	28	6643	46	14751	64	33315	82	133007
11	2131	29	6976	47	15386	65	35107	83	153499
12	2349	30	7320	48	16051	66	37046	84	180811
13	2572	31	7675	49	16746	67	39152	85	219038
14	2799	32	8040	50	17475	68	41445	86	276362
15	3032	33	8418	51	18239	69	43955	87	371885
16	3270	34	8807	52	19042	70	46713	88	561810
17	3514	35	9210	53	19887	71	49758	89	1135891
18	3764	36	9626	54	20777	72	53137	90	*endleſſe*

CHAP. XXIII.

Of the vſe of the Aſtrolabie and Croſſe-Staffe.

HOld the Aſtrolabie with the Finger by the vppermoſt ring, and let the Sunne ſhine through the hole in the vppermoſt Eare or little Table, right vpon the hole in the vndermoſt Eare, and then the outermoſt part of the Alhidada or Pointer ſheweth on the outermoſt ſide the Altitude or heighth of the Sunne. In the obſeruation men muſt be carefull, that the Aſtrolabie doe driue or hang looſe without any let or hinderance, for the moſt part men can with the euill holding of it, cauſe it to point a quarter of a Degree amiſſe on the one ſide or other.

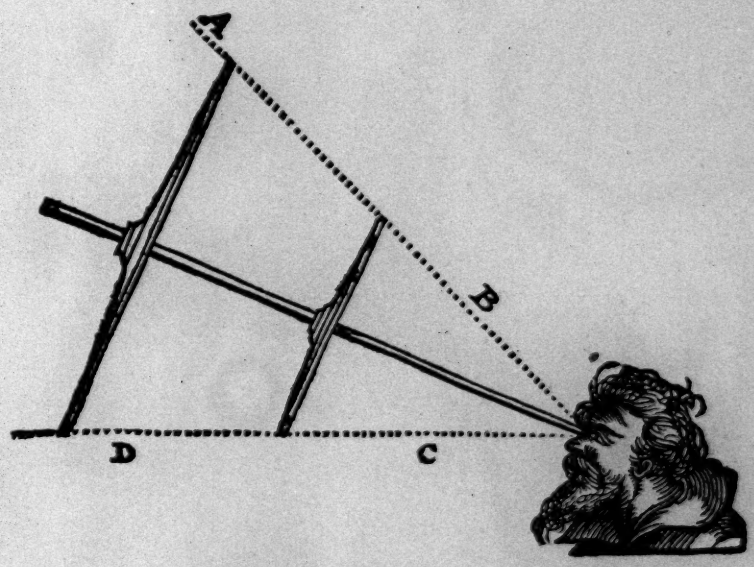
The Croſſe-ſtaffe ſet the end thereof either to the in-ſide or out-ſide of the Eye, ſo that the end of the Staffe come to ſtand right with the Center of the Motion of the Sight, then moue the Croſſe ſo long off from you or towards you, holding it right vp and downe and wincking with your other Eye till that the vpper end come vpon the middle or Center of the Sunne or Starre, and the lower end right with the Horizon. The Croſſe then ſhall ſhew vpon the ſide of the Staffe belonging thereto, the Degree of the Altitude of the Sunne or Starre.

Whether that the Sunne be much or little eleuated from the Horizon, it cauſeth no errour in the vſe of the Aſtrolabie: But it is not ſo with the Croſſe-Staffe. The Sunne or Starres being high eleuated from the Horizon, the Croſſe commeth neerer to the Eye, then when they are but a little eleuated, and doe ſtand neere to the Horizon. Thereby the Eye maketh (ſeeing now to the lower and then againe to the vpper end of the Croſſe) greater motion in looking vp and downe, then when as the Sunne or Starre doe ſtand low. And in ſo much the Center of the Sight by ſuch looking vp and downe, is alſo moued vp and downe together with the end of the Staffe, a man ſeeth then ſmaller Angles then if it did remaine ſteadfaſt without mouing vp and downe together with the end of the Staffe, in regard whereof the Croſſe commeth neerer to the Eye then it ſhould, and there is found too much Altitude. This being found of many by experience, they were therefore wont to cut off a peece of the end of their Staues, or to ſet the begining of the Degrees one Degree and a halfe, or two Degrees neerer to the Center end of their Staues, but it is not the right meanes for to amend the foreſaid errours. The beſt meanes

of

of all (in my opinion) is, that vpon each ſeuerall heighth which men will obſerue, they doe try with two Croſſes ſet vpon the like Degrees, how the Staffe muſt be ſet, that they may ſee the ends of the ſame two Croſſes right one with the other; hauing found that, and then taking off one of the Croſſes, and ſetting the Staffe againe in the ſame manner as before, all errours will be ſo preuented which by the lifting vp or caſting downe of the Eye, might any manner of way happen.

Example.



Deſiring to obſerue the heighth of the Sunne or any Starre in the South, I make my geſſing as neere as I can, how high they ſhall ſtand (or take the heighth of them a little before they come to the South) which I take to be 50 Degrees, I ſet therefore the two Croſſes each vpon their 50 Degrees, and the end of the Staffe in the inner corner or in the hollow of the Eye bone on the out-ſide of the Eye, and bow the Head forward or backward, or ouer the one ſide or other, till that I ſee the vtmoſt ends of both the Croſſes right one with the other, according as is ſhewed by theſe Lines A B and C D in the Figure here adioyned. It is apparant enough by the ſame Figure that the Sight beames ouer the ends of both Croſſes ſhall then agree with the Lines which might be drawne ouer the ends of the Croſſes to the point or center at the end of the ſtaffe, which doth agree with the center of the Quadrant, or the begining of the equall points vpon which the Staffe is marked; keeping in memorie ſuch ſtanding of the Staffe, I take off the one Croſſe and ſet the Staffe againe in the foreſaid manner to the eye, and I obſerue ſo without any errour of the Eye.

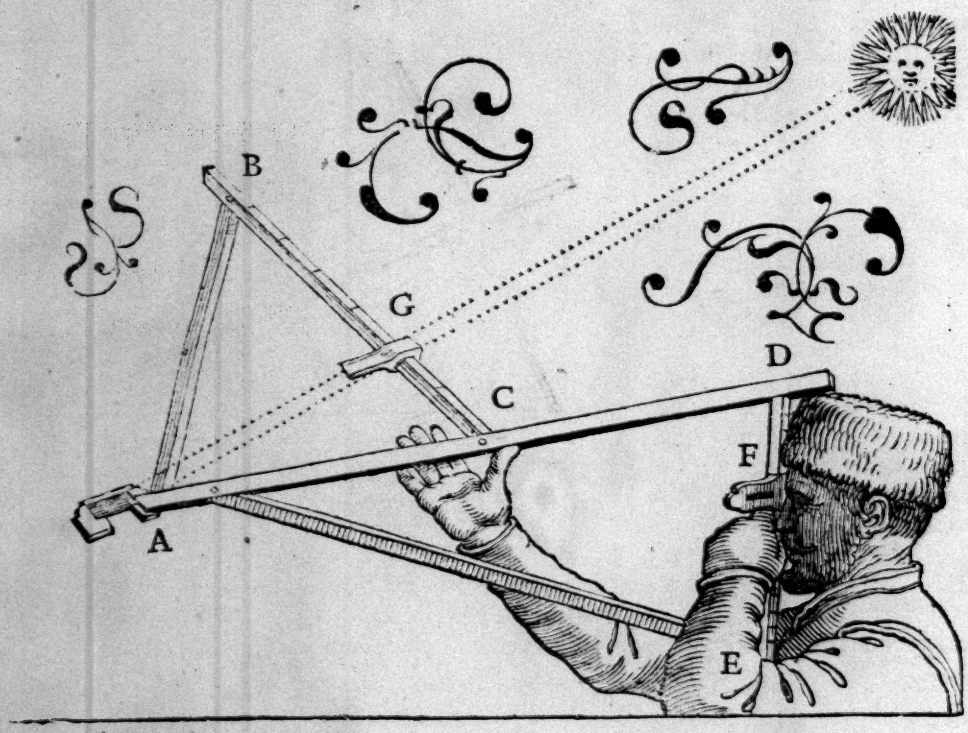
Men doe obſerue with the Croſſe-Staffe, and alſo with the Aſtrolabie together two different things. The heighth of the Sunne or of any Starre aboue the Horizon, and alſo their Complement of the heighth, that is, how farre they ſtand from the Zenith or vppermoſt point of Heauen ouer their Heads.

The ſide of the Aſtrolabie is commonly marked with dubble Siphers, the one beginneth from beneath vpwards with 1, 10, 20, 30, &c. ending aboue vnder the Ring with 90. The other beginneth aboue vnder the Ring with 1, 10, 20, 30, &c. downewards ending with 90 at the vnder ſide of the halfe Circle. When you obſerue the Sunne with the the Aſtrolabie and doe vſe the firſt numbers, that ſheweth how many degrees the Sunne is eleuated aboue the Horizon, therefore the higher the Sunne is, the greater number you ſhall finde, If you vſe the other numbers, you ſhall not finde the heighth of the Snnne but the Complement of the heighth, that is, how farre the Sunne is from the Zenith or vppermoſt point of the Heauens right ouer your Head, and therefore the higher the Sunne is, you ſhall finde (contrarie to the former) the leſſer number.

The Croſſe-Staffe is alſo marked with two kindes of numbers, the one hath towards the Eye-end 90, and is numbred towards the vtmoſt end by deminiſhing, as from 90 to 80, 70, 60, &c. The other begineth by the Eye-end and encreaſeth contrariwiſe towards the vtmoſt end, as from one to 10, 20, 30, &c. When you doe obſerue the Sunne or any Starre with the Croſſe-Staffe, and doe vſe the firſt numbers, you ſhall finde how high they ſtand aboue the Horizon, the higher that the Sunne or Starre ſtand, the neerer the Croſſe commeth to the Eye, and thereby get the greater number. If you vſe the other numbers, you ſhall not finde how high any Celeſtiall Light ſtandeth (which you obſerue) aboue the Horizon, but how farre that it ſtandeth from the Zenith, the lower the Lights are, the farther the Croſſe commeth from the Eye, and the greater is the number.

Although in taking the heighth of the Sunne with the Croſſe-Staffe men doe vſe Red or Blew Glaſſes for ſauing and preſeruing of the Eyes, yet is it notwithſtanding a great let and verie troubleſome for the ſight, eſpecially if it be high. Men ſhall then more eaſily and

and conueniently obſerue the heighth of the Sunne by his ſhadow, with ſuch a backe Staffe or double Triangle, as here following ſtandeth portrayed, whereof the one A B C 60, and the other A D E containeth 30 Degrees: Setting the Fane G at a certaine number of Degrees, as the Altitude of the Sunne requireth, and looking through the Fane F to the vnder edge of A the Horizon, remouing F ſo long vp and downe, till that the ſhaddow of G fall vpon the Fane A betweene the two Lines, the number of the Degrees then betweene G C and D F being added together, doe ſhewe the Altitude of the Sunne aboue the Horizon, or the numbers betweene E F and G B together the diſtance of the Sunne from the Zenith.



Example.

I ſet the Fane G at 20 Degrees from C towards B looking through the Sight-hole of the Fane F and remoue that vp and downe till that the ſhadow of G fall at once betweene the two Lines vpon the white Fane A and the vndermoſt edge of the foreſaid Fane right vpon the Horizon, and ſo I finde betweene D and F 16 Degrees, which added to the 20 of G C make together 36 Degrees for the Altitude or height of the Sunne aboue the Horizon, or the 40 from G to B and 14 from F to E together 54 giue the Complement of the heighth, or the diſtance of the Sunne from the Zenith.

CHAP. XXIIII.

Hovv the Altitude or heighth of the Pole may be found by the Sunne.

FOr to finde the Eleuation of the Pole or Equinoctiall by the Sunne, you muſt firſt and before all things knowe whether you be to the northwardes or ſouthwards of the Sunne. Secondly, whether he be declyned northward or ſouthward from the Lyne. The firſt whether the Sunne be to the ſouthward or northward of the Zenith may eaſily be perceiued by the ſhadowe, if you be any thing farre off from the Sunne, but not ſo eaſily, when it doth ſtand neare over your head. If you then ſet a Compaſſe before you, and do hold an Aſtrolabie over it or beſide it, the one ſide right towards the North, and the other toward the South, and let the Sunne (being at the higheſt) ſhyne through the holes of the eares, the Alhidada or Pointer ſhall ſhewe whether the Sunne be to the ſouthwardes or the northwardes of the Zenith, and withall his Altitude aboue the Horizon, and diſtance from the Zenith. The ſecond of the Sunnes declination is founde by the eleuenth chapter.

1. If ſo

1. If ſo be the obſervation be made to the northwards of the Sunne, that is, that the Sunne be to the ſouthwards of the Zenith, & if the Sunne haue northerly declination ſubſtract the declynation from the obſerved Altitude, the remainder is the Altitude of the Equinoctiall in the ſouth, that ſubſtracted from 90 remayneth the Elevation or heigth of the Pole, juſt with the latitude of the place of the earth where you are.

2. Or if you adde the Declination to the Diſtance of the Sunne from the Zenith, you finde at the firſt the Complement of the Altitude of the Equinoctiall in the South, that is, the diſtance betweene the Equinoctiall and the Zenith, juſt to the Altitude of the Pole, or Latitude of the place where you are.

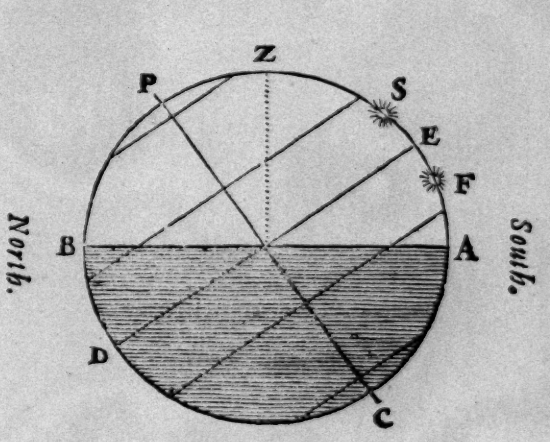
3. If it be South Declynation you muſt adde it to the obſerved Altitude: If that number be leſſe then 90, it ſheweth the Altitude of the Equinoctiall from the Horizon in the South. If it be more then 90, the Equinoctiall Line is then to the Northwards of the Zenith, juſt ſo much as the number is more then 90, the ſouth Pole ſo much aboue, and the North Pole to the contrarie ſo much under the Horizon. If it be juſt 90, the Equinoctiall Lyne ſtandeth then juſt 90 degrees elevated right in the Zenith, and both the Poles lye right with the Horizon.

4. Or, if you ſubſtract the South Declination from the found diſtance of the Sunne from the Zenith, there remaines the diſtance of the Equinoctiall from the Zenith, juſt to the North Poles Altitude. If the Declination be more then the diſtance of the Sunne from the Zenith: in ſuch caſe, ſubſtract the diſtance of the Sunne from the Declination, and that which remaineth, juſt ſo much is the Equinoctiall Lyne removed from the Zenith towards the North, the ſouth Pole ſo much elevated, and the North pole ſo much ſunck under the Horizon. *If* the Declination and the diſtance of the Sunne from the Zenith be alike greate, the Equinoctiall ſtandeth then in the Zenith and both the poles lye without elevation to the Horizon.

1. *Example.*

VVith the Altitude of the Sunne aboue the Horizon and north Declination.

Let in this figure P be the north, and C the ſouth Pole, D E the Equinoctiall, A B the Horizon; Let A S the Altitude of the Sunne be 55 degrees, S E the Declination towards the North 12 degrees. If then you ſubſtract S E 12, the Declination, from A S 55 the Altitude, there remaineth E A 43 for the Altitude or height of the Equinoctiall. That being deducted from 90, as out of E C, there remaineth 47 for A C the depth of the ſouth Pole under the Horizon, juſt to B P the heigth of the North pole aboue the Horizon.



2. *Example.*

VVith the diſtance of the Sunne from the Zenith.

Let the diſtance of the Sunne from the Zenith (or the Complement of his Altitude) be Z S 35 degrees, adde thereunto the North Declination S E 12 degrees, which maketh 47 for Z E the diſtance of the Equinoctiall from the Zenith, juſt to B P the heigth of the north pole.

3. *Example.*

VVith ſouth Declination.

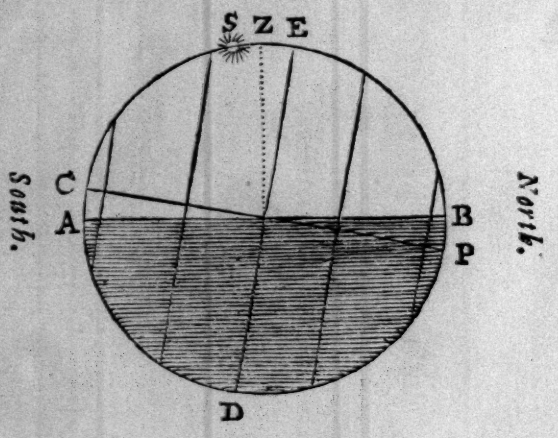
In the former figure let A F be the Altitude of the Sunne aboue the Horizon 28 degrees, the South declination E F 12 degrees. If the declination E F 12 be added to A F 28 the Altitude of the Sunne, you ſhall gette for E A the heigth of the Equinoctiall 40 degrees, which being deducted from A Z 90, there remaineth Z E 50 degrees, for the diſtance of the Equinoctiall from the zenith, juſt to B P the Altitude of the north Pole.

4. *Example.*

4. Example.

In the former figure let Z F be the diſtance of the Sunne from the zenith 62 degrees, if you deduct from it E F 12 the ſouth declination, there remaineth Z E 50 the diſtance of the Equinoctiall from the zenith, juſt (as before) to B P the Altitude of the pole, or the Latitude of the place where you are.

5. Example.



In this figure here adjoyning let the Altitude of the Sunne in the ſouth be A S 82 degrees, and the ſouth declination E S 20 degrees, if then you adde E S 20, to A S 82, it maketh for E A 102 degrees: deducting from it A Z 90, there remayneth 12 degrees for Z E the diſtance of the Equinoctiall towards the North. The North Pole P is then ſo much under, and C the ſouth pole ſo much aboue the Horizon.

6. Example.

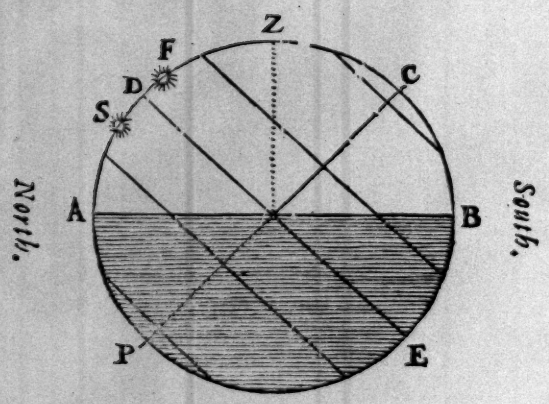
Let the diſtance of the Sunne from the zenith be Z S 8 degrees, the declination E S 20 degrees, more then the diſtance betweene the zenith and the Sunne. Deduct therefore Z S 8 degrees, from S E 20 the Declination, there remayneth for E Z 12 degrees, that the Equinoctiall ſtandeth to the northwards of the zenith as before.

If the Declination and the diſtance of the Sunne were both alike eight degrees, as from S to Z, there ſhould then (as appeareth by this figure) be no difference betweene the zenith and the Line, and conſequently, both the poles ſhould be without any elevation.

If the obſervation ſhould be made to the ſouthwards of the Sunne, that is, that the Sunne ſtand to the northwards from the zenith, you ſhall doe euen as is ſhewed before, as if the Sunne did ſtand to the ſouthwards from the zenith, onely with this difference, that in the place that here before hath beene ſaid of the North pole, muſt be underſtood here of the South pole, and the Latitude which was then found to the northwards of the Line, now on the contrarie commeth to be to the ſouthwards of the Line.

1. Example.

With South Declination.



In this figure let C be the ſouth and P the north pole, D E the Equinoctiall, B A the Horizon, Z the zenith. Let A F be the Altitude of the Sunne aboue the Horizon in the north 58 degrees, D F ſouth declination 8 degrees. If you deduct the declination D F 8, from F A the Altitude, there remaineth D A 50 degrees, the Altitude or height of the Equinoctiall aboue the Horizon in the north, that being deducted out of D P 90, remaineth A P 40 degrees for the depth of the north pole under the Horizon, juſt to C B the Altitude of the ſouth pole aboue the Horizon in the ſouth.

2. Example.

With the Complement of the Altitude of the Sunne.

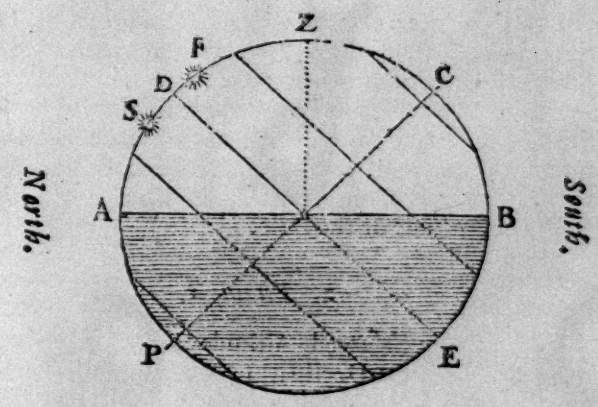
In the former figure let Z F be the Complement of the Sunnes Altitude 32 degrees, adde thereto D F the ſouth Declination 8, making together 40 for D Z the Complement of the height, or Altitude of the Equinoctiall, juſt to C B the altitude of the ſouth pole.

With

With North Declination.

1. Example.

Let S A be the altitude of the ſunne in the north 39 degrees, S D the north Declination 14 degrees. If you adde the Declination D S 14, to A S 39 the Altitude of the ſunne, you ſhall get for D A the Altitude of the Equinoctiall 53 degrees, which being deducted from A Z 90, there remaineth for D Z the Complement of the Altitude of the Equinoctiall, juſt to C B the Altitude of the ſouth Pole aboue the Horizon, 37 degrees.

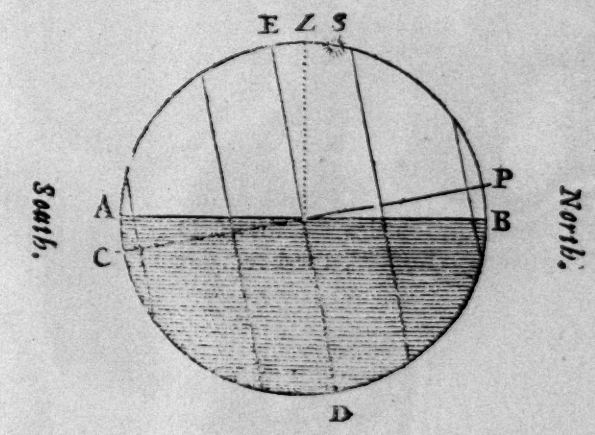


2. Example.

Let Z S be the Complement of the Sunnes Altitude 51 degrees, deduct from it D S the north declination 14 degrees, there remayneth for D Z the diſtance of the Equinoctiall from the Zenith 37 degrees, juſt as before to the Latitude of the placewhere you obſerue.

3. Example.

Let the Altitude of the ſunne in the north be B S 82 the north declination E S 21 degrees. If you adde the Altitude S B 82 to the declination S E 21 degrees. there commeth for B E 103 degrees, the diſtance of the Equinoctiall from the Horizon in the north, B Z 90 being deducted from it, remaineth for Z E the diſtance of the Equinoctiall from the Zenith towards the ſouth 13 degrees, juſt to B P the Altiiude of the north Pole, aboue the Horizon.



4. Example.

Let the Complement of the Sunnes Altitude be S Z 8 degrees, the north declination E S 21 degrees, being more then the diſtance of the Sunne from the Zenith. Deduct therefore S Z 8 the complement of the Altitude from S E 21 the declination; there remaineth 13 for Z E the diſtance of the Equinoctiall from the Zenith, as before.

When as you ſayle ſo farre northwards or ſouthwards, that the Sunne goeth not downe, as they finde that ſaile aboute the North-Cape, and to Spitſberghen, or Greenland, and that you would obſerue the Altitude by the Sunne, alſo when he is in the north at the loweſt.

I. There muſt be added unto the Altitude of the Sunne taken aboue the Horizon, the Complement of the Sunnes Declination, (that is the diſtance betweene the Sunne and the Pole) that number ſheweth the Altitude of the Pole.

II. Or els the obſerved Altitude muſt be deducted from the Declination, that which remaineth is the depreſſion or depth of the Equinoctiall under the Horizon, in the North, juſt to the Altitude of the ſame in the ſouth, the Complement thereof is the Altitude or height of the Pole.

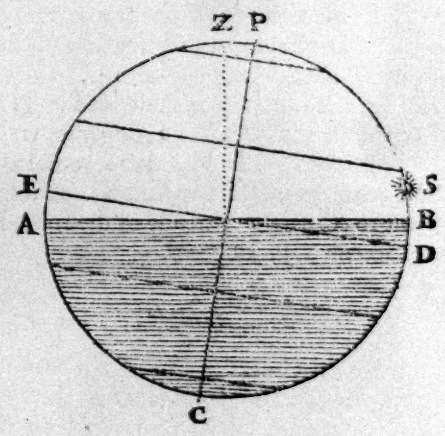
III. If you take the Complement of the Sunnes Altitude, and deduct from it the Complement of the Sunnes Declination, there remayneth the diſtance of the Pole from the Zenith, or the Altitude of the Equinoctiall in the South, the Complement thereof is the Altitude or Height of the Pole.

4. Or els, if you adde the Declination to the Complement of the Altitude, and you deduct 90 out of that number added togethers, there remaineth the depth of the Equinoctial in the North under the Horizon: that being deducted out of 90, there remaineth the Altitude of the Pole.

1. Example.

Let P be the north and C the south Pole, E D the Equinoctiall S the Sunne, D S the arch of the Sunnes Declination 18 degrees.

Let B S be the obserued Altitude of the Sunne 8 degrees, and S P the Complement of the Declination 72. I adde B S 8 the Altitude of the Sunne, to S P 72 the Complement, it maketh 80 for B P the Altitude of the Pole.



2. Example.

I deduct the obserued Altitude B S 8 degrees, from S D 18 the Declination of the sunne, there remaineth D B 10 the depth of the Equinoctiall in the north under the Horizon, just to A E the Altitude of the Equinoctiall in the south aboue the Horizon, the which being deducted from D P 90, there remaineth P B 80 degrees for the Altitude of the Pole.

3. Example.

Let Z S be the distance of the Sunne from the Zenith 82 degrees, I deduct from it S P 72 the Complement of the Declination, there remaineth Z P 10 the distance of the Pole from the Zenith, that being deducted from Z B 90, there remaineth for P B 80 degrees the Altitude of the Pole.

4. Example.

Or els I adde the declination S D 18 to the knowne distance of the Sunne from the Zenith Z S 82, maketh 100 degrees for Z D, Z B 90 being deducted from it, there remaineth for B D the depth of the Equinoctiall in the north under the Horizon 10 degrees, that being deducted from D P 90, there remaineth P B 80 for the Altitude of the Pole.

CHAP. XXV.

Of the difference and Equation of Declination in diuers places of the Earth.

THese Tables of the Sunnes declination, are calculated for the Meridian, or Longitude of the Earth of the West-end, or the Lands-end of England. They that are more easterly from thence, haue the declination lesse, so that when the Sunne declyneth from the Line, and increaseth in declination, either northward or southward, as well betweene the 20 of March and the 22 of Iune, as betweene the 23 of September and the 22 of December: and more when the Sunne turneth againe towards the Line, whether it be also by north or by south the Line, as well betweene the 22 of December and the 20 of March, as betweene the 22 of Iune and the three and twentieth of September.

On the contrarie, they that are more westerly from thence, haue the increasing declination more, (that is, when as the Sun declineth off from the Line, either by north, or by south the Line) & the decreasing declination lesse, (that is when the Sunne declineth again towards the Line, whether it be also by north or by south the Line.) That happeneth becausé of the time thus: They that are more easterly, haue the sunne sooner in the South, or to their Meridian, & therefore the increasing Declination lesse, and the decreasing declination more, to the contrarie, they that are more westerly get the sunne later in their south, and therefore they haue the increasing Declination more, & the decreasing Declination lesse.

1. Example.

1. Example.

Of those that are more easterly with increasing Declination.

ON the 25 of March, in the second yeare after the Leape yeare, I desire to knowe the declination of the Sunne at noone, at Bantam in the East-Indies. First I looke upon a Globe, or in any other table, how much Bantam lyeth more easterly then the Lands end of England, and finde about 120 degrees, (we doe not esteeme here one degree or two, because that such difference doth amounte to little in this practise) Seing then, that the Sunne, for his course about the heauen or the whole Earth, which is 360 degrees, hath neede of 24 houres, I would knowe how much time he needeth to runne aboute 120 degrees, and say thus, 360 degrees require 24 houres, what time will 120 haue, facit 8 houres. VVhereby I finde, that the Sunne commeth 8 houres sooner to the south at Bantam then at the Landsend of England, that is: that the Sunne standeth south at Bantam when at the Lands-ende of England it is four houres after midnight. Afterwards I seeke in these tables the declination of the Sunne on the foresaid 25 of March, and finde one degree 57 minutes, and (out of the declination of the day following, 2 degrees 21 minutes) that the declination of the Sunne at that time in 24 houres encreaseth 24 minutes, I say therefore: In 24 houres time the declination encreaseth 24 minutes, how much then in 8 houres? facit 8 minutes. Thence it appeareth, that whiles the Sunne runneth from the Meridian over Bantam unto the Meridian of the Lands end of England, and the declination 8 minutes encreaseth, that the declination at Bantam is 8 minutes lesse, then these tables doe shewe. The Sunnes declination then at Bantam on that day is no more then one degree and 49 minutes by north the Line.

2. Example.

VVith decreasing Declination.

ON the 16 of September of the same yeare I desire to knowe the declynation of the Sunne, (at noone) at Bantam, which I finde to be for that day in these tables for the Longitude of the Lands end of England 2 degrees 40 minutes, and (out of the declination of the day following 2 degrees 16 minutes) that at that time of the yeare it doth decrease everie day about 24 minutes. Seeing then the Sun (as hath been said in the first example) cometh eight houres sooner to the south at Bantam, then at the Lands ende of England, I say: In 24 houres the declination decreaseth 24 minutes, how much in eight houres? facit 8 minutes; thence it appeareth that while that the Sunne runneth from the Meridian of Bantam, unto the Meridian of the Lands end of England the declination decreaseth 8 minutes, and therefore at Bantam it is 8 minutes more, then these Tables doe shewe. The Declination of the Sunne on that day at Bantam is then 2 degrees 48 minutes.

NOTE.

Hence it followeth that one and the same Pilote (sayling eastwards to the Indies) comming at two such severall times before the Strait of Sunda, and obserning the Altitude of the Pole of one same point of land by the Sunne, useth these tables of declination without such regard: he should, although obseruing well, thereby, (the one time taking 8 minutes too much declination, and the other 8 minutes too little) differ 16 minutes in the finding of his Altitude, wherefore in farre voyages men must be careful of such things.

3. Example.

Of those that are more vvesterly vvith increasing declination.

A Shippe comming on the 9 of October in the third yeare after the Leape yeare, into the great South Sea, thwart of the coast of Peru, the Pilot desireth to know the declination there at noone, he findeth by a Globe, or some other table, that that Coaste lieth at least 80 degrees more westerly then the Lands-end of England. The Sunne then must runne from the south over the Lands end of England, unto the south of the foresaid coast of Peru, at least 80 degrees whereto he must haue about 5 houres and a halfe, so that when the Sunne standeth there in the south, it is at the Lands ende of England fiue houres and a halfe after noone. He findeth in these tables the declination of that daye 6 degrees 13 minutes by south the Line, and (out of that of the day following 6 degrees 36 minutes) that at that time in 24 houres the declination increaseth 23 minutes, therefore he shall say: in 24 houres the declination increaseth 23 minutes how much in fiue houres and an halfe? facit at least fiue minutes, and from thence he shall finde, that while the Sunne runneth from the Meridian of the Lands end of England unto that of the coast of Peru, the declination encreaseth at least 5 minutes, & therefore the declination on that day is 5 minutes more there, then the Tables doe shewe. The Declination then on that day, on the coast of Peru is 6 degrees 18 minutes.

4. Example.

With decreasing declynation.

I Suppoſe ſuch a thing happened on the foreſaide coaſt of Peru, upon the tenth day of September the ſame yeare: theſe Tables ſhewe the declination of that day 5 degrees 4 minutes, and the day foling 4 degrees 41 minutes, ſo that at that time of the yeare, in 24 houres time, the Declination decreaſeth 23 minutes. The Pilot ſhall then reckon thus: in 24 houres the Declination decreaſeth 23 minutes, how much in $5\frac{1}{2}$ houres. Facit at leaſt 5 minutes: and from thence he ſhall finde, that his Declination there is 5 minutes leſſe then theſe Tables doe shewe. The Sunnes Declination then upon that day, is on the Coaſte of Peru 4 degrees 59 minutes.

Hence it may be underſtood, as before hath been ſaid in the Examples of thoſe that are more eaſterlye, that a Pilote being on the coaſt of Peru, at two ſuch ſeverall times, and would obſerue the Sunne in one ſelf ſame place, (and uſe theſe Tables of Declination without the foreſaid conſideration) although obſerving well and exactly, should thereby finde 10 minutes difference in the Altitude.

5. Example.

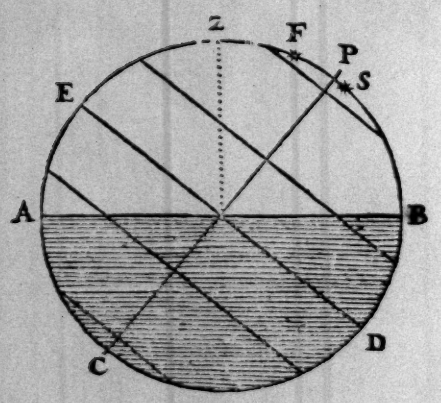
Two shippes being together depart out of this land, the one ſayleth eaſtwardes, and commeth by his reckoning, upon the 28 of September, in the firſt yeare after the Leape yeare, on the other ſide of the Globe of the Earth, I ſuppoſe 180 degrees in Longitude diſtant from the Lands end of England, findeth in theſe Tables the Declination on that day, 2 degrees 8 minutes. The other shippe ſayleth weſtward, and meeteth the firſt shippe at the foreſaid place, by his reckoning not on the 28, but on the 27 of September, and findeth the Declination in theſe tables for that day, one degree 44 minutes, ſo that they differ in the time one day, and conſequently in the declynation 24 minutes, the which proceedeth from this cauſe. The firſt hauing ſayled againſt the riſing of the Sunne 180 degrees hath shortened his time 12 houres, the other hauing ſayled with the Sunne 180 degrees, hath lengthened his time 12 houres, and thereby hath had one night leſſe then the firſt: Seing then that the Declination at that time in 24 houres encreaſeth 24 minutes, he that ſayled eaſtwards muſt reckon 12 minutes declination leſſe, and he that ſayled weſtwards 12 minutes more, then the Tables doe shewe, and ſo both of them shall keepe one manner of Declination, to weete 1 degree 56 minutes.

CHAP. XXVI

For to obſerue the Altitude of the Pole by the ſtarres.

FOR to obſerue the Altiude by the ſtarres which are about the Equinoctial, the ſame practiſe is uſed (ſubtracting or adding their declinations) euen as is done with the Sunne. They that are about the Poles, we ſubſtract or adde their diſtance from the pole to their obſerved Altitude, and ſo finde the Altitude of the pole.

1. Example.



Let A B be the Horizon, P the north pole, E D the Equinoctiall, S the North ſtarre ſtanding under the pole: I obſerue the Altitude of the North ſtarre S B aboue the Horizon 46 degrees, and in the table here before I finde the diſtance of the North ſtarre from the pole P S 2 degrees 42 minutes, that being added to the obſerved Altitude B S, make together 48 degrees 42 minutes for P B the Altitude of the pole.

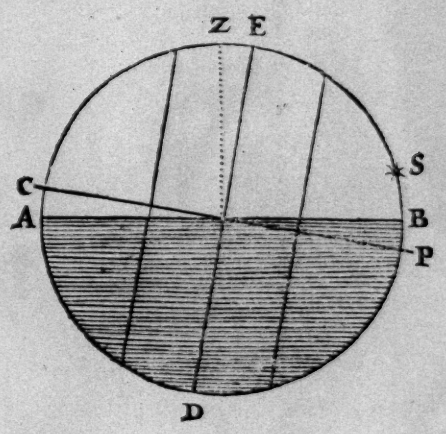
2. Example.

Let F be the brighteſt of the Guardes aboue the pole, elevated aboue the Horizon F B 58 degrees, his diſtance from the pole F P 14 degrees 14 min. being deducted from it, (as the Table here before sheweth) there remayneth for P B the Altitude of the pole 43 degrees 46 minutes.

IF you come to the ſouthwards of the Line, & wil uſe the Starres about the north pole, then you may deduct the obſerved Altitude from the diſtance of the ſtarres from the Pole, & ſo finde the depth of the North pole under the Horizon, juſt to the Altitude of the South pole aboue it.

3. Example

3. Example.

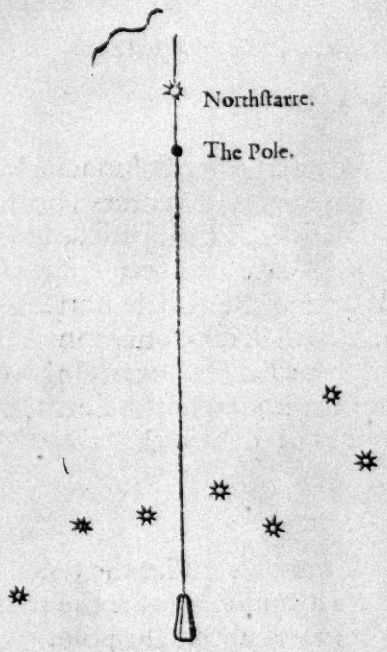


Let S be the northermoſt hinder wheele of Charles wayne or of the Poynters, his Altitude aboue the Horizon in the North B S 20 degrees, that being deducted from S P 26 degrees 14 minutes his diſtance from the Pole, there remayneth B P 6 degrees 14 minutes, that the North pole is ſuncken under the Horizon, juſt to C A the altitude of the South pole.

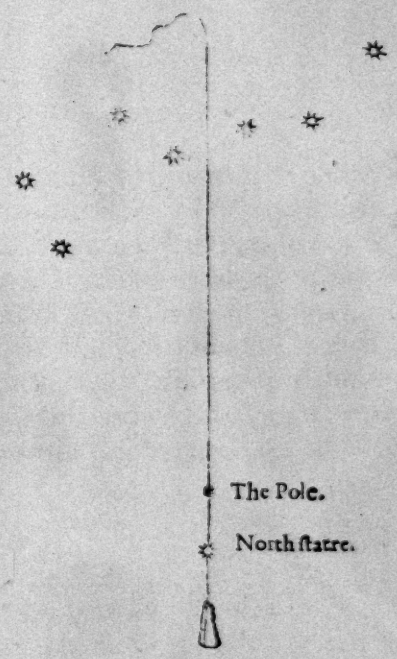
LIke as the ſtarres to the ſouthwards, being right in the ſouth are at their higheſt, ſo they are to the northwards being in the north, aboue the Pole, alſo at the higheſt, or under the pole at the loweſt, that you may almoſt ſee by the eye, for many that ſtand ſomewhat farre from the pole, to weete, when they ſtand under or aboue the North ſtarre, but not rightly, becauſe the North ſtarre it ſelfe, by his owne turning about the pole doth digreſſe to the one and the other ſide, from the right North, ſo that you muſt finde by obſervation (when they come neare the North) the right loweſt or higheſt.

For to knowe when the North ſtarre is at the higheſt or loweſt, you muſt obſerue Charles wayne, ſtanding in the figure of the Great Beare, whenas that commeth under the North ſtarre, ſo that if you ſhould let hang a Plummet right againſt the North-ſtarre, it ſhould come to hange then alſo through betwixt the fourſquare ſtarres of the ſame Wayne, and the Horſes, ſtanding in the tayle of the Greate Beare, then is the North ſtarre right at the higheſt aboue the Pole.

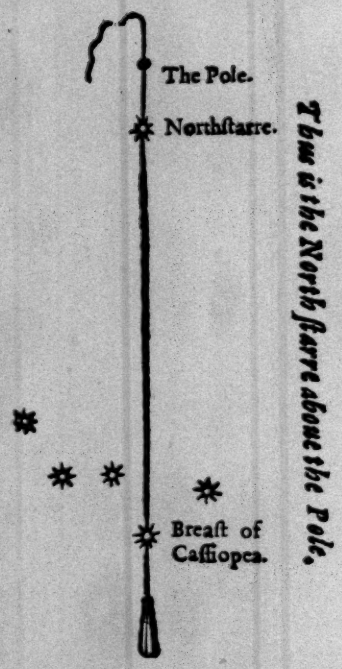
Or when as the Wayne commeth ſo aboue the North ſtarr, that if you ſhould let a plummet hang through betwixt the Wayn and the Horſes, that it hang then alſo right againſt the North ſtarre, then is the North ſtarre right under the Pole at the loweſt, as is ſhewed in the figures following.



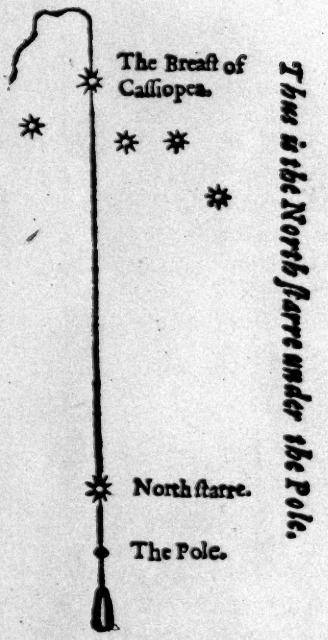
Thus is the North ſtarre right aboue the Pole.



Thus is the North ſtarre right under the Pole.



Thus is the North ſtarre aboue the Pole.



Thus is the North ſtarre vnder the Pole.

Or as the ſtarre in the Breaſt of Caſſiopea commeth right aboue the North-ſtarre, then is the North ſtarre aboue the pole at the higheſt, and when the ſame is right vnder the North ſtarre, then is the North ſtarre at the loweſt vnder the pole, as is ſhewed in the figures prefixed.

The ſtarres of Charles wayne are known to everie man.

The ſtarres in Caſſiopea whereof are fiue verie bright ſtarres, the chiefeſt are of proportion, as here before ſtandeth pourtrayed. The ſecond of them, that is, which ſtandeth fartheſt of all diſtant from the North ſtarre, is that in the breaſt, and ſtandeth verie neare euen ſo farre from the North ſtarre, as the ſtarre next to the Horſes of the Charles wayne. If you hould a right ſtaffe upon your ſight, with the one end through between the Wayne and the Horſes, and with the middeſt over the North ſtarre, the other ende ſhall then reach over the foreſaid Starre in Caſſiopeas breaſt.

CHAP. XXVII.

The vſe of the North ſtarre as you ſet it by the Guardes, and the northermoſt hinder wheele of Charles Wayne.

SEeing that manie of the fixed ſtarres are not knowne by their names vnto many Pilotes, and therefore doe keepe themſelues onely to the vſe of the Northſtarre, according to the points of the Compaſſe, we haue for the benefit of ſuch, newly calculated two kindes of tables, the one according to the Guardes, (which vnto this time we haue corrected from the digreſſion) the other according to the northermoſt hinder wheele of Charles wayne, or the Poynters, both vpon the four points of the Compaſſe, of North South, Eaſt, and Weſt: and ſeeing after ſuch a manner of working the North ſtarre in divers Latitudes, hath divers ſituations: We haue calculated the Tables, according to divers heights or Latitudes of the Earth, from 10 to 10 degrees as followeth.

In the height of 10 degrees.

When the brighteſt of the Guards ſtandeth in the
- Eaſt, the North ſtarre is 1 degree and 28 minutes vnder the pole.
- North, the North ſtarre is 2 degrees and 18 minutes vnder the pole.
- Weſt, the north ſtarre is 1 degree 22 minutes aboue the pole.
- South, the North ſtarre is two degrees and eighteene minutes aboue the pole.

In the

In the height of 20 degrees.

When the brighteſt of the Guards ſtandeth in the
- Eaſt, the North ſtarre is 1 degree 31 minutes under the pole.
- North, the North ſtarre is two degrees eighteene minutes under the pole.
- Weſt, the north ſtarre is one degree 19 minutes aboue the pole.
- South, the North ſtarre is two degrees 19 minutes aboue the pole.

In the height of 30 degrees.

When the guards ſtand in the
- Eaſt, the North ſtarre is one degree 35 minutes under the pole,
- North, the North ſtarre is two degrees 18 minutes under the pole.
- Weſt, the Northſtarre is one degree 14 minutes aboue the pole.
- South, the North ſtarre is two degrees 19 minutes aboue the pole.

In the height of 40 degrees.

The Guardes in the
- Eaſt, the North ſtarre is then one degree 39 minutes under the pole.
- North, the North ſtarre is two degrees 17 minutes under the pole.
- Weſt, the North ſtarre is one degree 10 minutes aboue the pole.
- South, the North ſtarre is two degrees 19 minutes aboue the pole.

In the height of 50 degrees.

The Guardes
- Eaſt, the North ſtarre is then one degree 44 minutes under the pole.
- North, the North ſtarre is 2 degrees 17 minutes lower then the pole.
- Weſt, the North ſtarre is one degree 3 minutes aboue the pole.
- South, the North ſtarre is two degrees 20 minutes aboue the pole.

In the height of 60 degrees.

The Guardes
- Eaſt, the North ſtarre is one degree 52 minutes under the pole.
- North, the North ſtarre is two degrees 16 minutes under the pole.
- Weſt, the North ſtarre is 53 minutes higher then the pole.
- South, the North ſtarre is two degrees 20 minutes aboue the pole.

In the height of 70 degrees.

The Guardes
- Eaſt, the North ſtarre is two degrees 5 minutes under the pole.
- North, the North ſtarre is two degrees 15 minutes under the pole.
- Weſt, the North ſtarre is 32 minutes aboue the pole.
- South, the North ſtarre is two degrees 22 minutes aboue the pole.

In the height of 80 degrees.

The Guardes
- Eaſt, the North ſtarre is 2 degrees 33 minutes under the pole.
- North, the north ſtarre is 2 degrees 12 minutes under the pole.
- Weſt, the north ſtarre is 33 minutes lower then the pole.
- South, the North ſtarr is 2 degrees 44 minutes higher then the pole.

The vſe of the North ſtarre according to the northermoſt hinder vvheele of Charles vvayne, or the northermoſt of the Pointers.

In the height of 10 degrees.

When the northermoſt of the Pointers ſtādeth
- in the eaſt, then is the North ſtarre one degree one minute higher then the pole.
- in the north, the North ſtarre is 2 degrees 27 minutes under the pole.
- in the weſt, then is the North ſtarre 1 degree 13 minutes lower then the pole.
- in the ſouth it is under the Horizon out of our ſight.

In the height of 20 degrees.

When the northermoſt of the Pointers ſtãdeth
- East, the North ſtarre is 54 minutes higher then the pole.
- North, the North ſtarre is two degrees ſeuen and twentie minutes nnder the pole.
- Weſt, the North ſtarre is one degree 19 minutes under the pole.
- South, the North ſtarre is two degrees 27 minutes aboue the pole.

In the height of 30 degrees.

Whẽ the northermoſt of the Pointers ſtandeth
- East, the North ſtarre is 47 minutes higher then the pole.
- North, the North ſtarreis two degrees 27 minutes under the pole.
- Weſt, the Northſtarre is one degree 26 minutes under the pole.
- South, the North ſtarre is two degrees 27 minutes aboue the pole.

In the height of 40 degrees.

Whẽ the northermoſt of the Pointers ſtandeth
- East, the North ſtarre is 38 minutes aboue the pole.
- North, the North ſtarre is two degrees 27 minutes under the pole.
- Weſt, the North ſtarre is one degree 34 minutes under the pole.
- South, the North ſtarre is two degrees 28 minutes aboue the pole.

In the height of 50 degrees.

When the northermoſt of the Pointers ſtãdeth
- East, the North ſtarre is 24 minutes aboue the pole.
- North, the North ſtarre is 2 degrees 26 minutes under the pole.
- Weſt, the North ſtarre is one degree 45 minutes under the pole.
- South, the North ſtarre is two degrees 28 minutes aboue the pole.

In the height of 60 degrees.

When the northermoſt of the Pointers ſtandeth
- East, the North ſtarre is 2 minutes aboue the pole.
- North, the North ſtarre is two degrees 26 minutes under the pole.
- Weſt, the North ſtarre is two degrees one minute under the pole.
- South, the North ſtarre is two degrees 28 minutes aboue the pole.

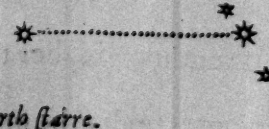
In the height of 70 degrees.

When the northermoſt of the Pointers ſtãdeth
- East, the North ſtarre is 41 minutes under the pole.
- North, the North ſtarre is two degrees 25 minutes under the pole.
- Weſt, the North ſtarre is 2 degrees 22 minutes under the pole.
- South, the North ſtarre is two degrees 29 minutes aboue the pole.

In the height of 80 degrees the northermoſt of the Pointers can never come in equall height with the North ſtarre from the Horizon.

The explanation of the East, West, South and North of the Guardes, and of the Great Beare.

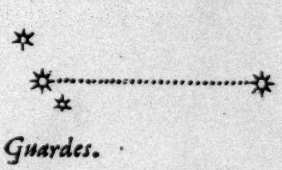
The Guardes being eaſt, that is, when the brighteſt or middlemoſt ſtandeth towards the eaſt, juſt ſo high aboue the Horizon as the Northſtarr, as is ſhewed in this firſt figure.



The Guardes being north, is whẽ the brighteſt ſtandeth right aboue the North ſtarre, as in this ſecond figure.

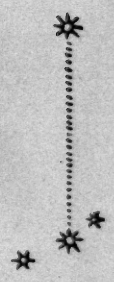
The

The Guardes in the weſt, that is when the middlemoſt of the Guardes ſtand weſtwards from the North ſtarre, and therewithall of equal height aboue the Horizon, as in this third figure.

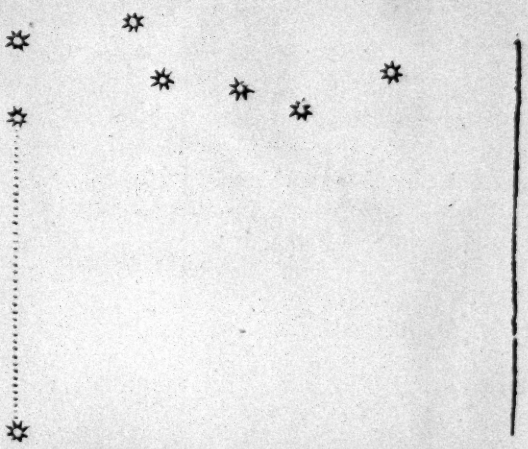


Guardes.

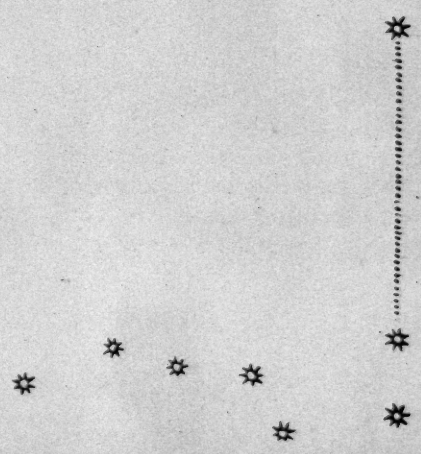
The Guardes in the ſouth, that is when the brighteſt of them ſtand right under the North ſtarre, as in this fourth figure.



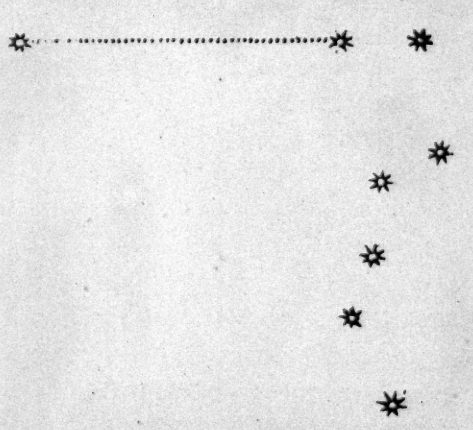
In the ſame manner as of the Guardes, it is alſo to be underſtood of the Eaſt, Weſt, South and North of the Northermoſt Pointer thus.



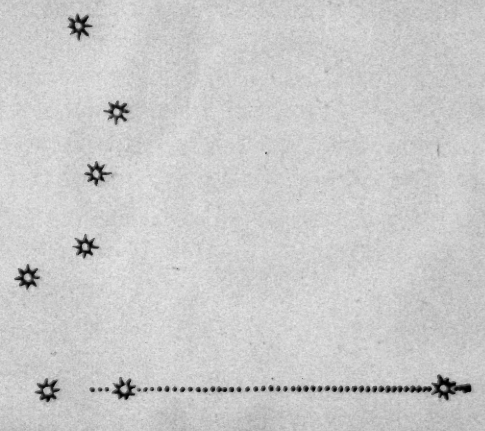
The northermoſt pointer in the north, that is when it ſtandeth right aboue the North ſtarre, as is ſhewed in this firſt figure.



The ſame Northermoſt Pointer of the Great Beare in the ſouth, is when it ſtandeth right under the North ſtar, as in this 3 figure.



The northermoſt Pointer in the eaſt, is when the ſame ſtandeth eaſtwards of equall height aboue the horizon as the Northſtarre, as in this ſecond figure.



The ſame in the weſt, that is, when it ſtandeth weſtward, equally high as the Northſtarre aboue the Horizon, as in this fourth figure.

The uſe of the foreſaid Tables.

YOU muſt waite, untill that you haue the brighteſt of the Guardes or the northermoſt Pointer upon ſome of the foreſaid pointes, then you muſt obſerue the height of the North ſtarre aboue the Horizon. By that obſerved height together with the reckoning you may know verie neer the height of the Pole, at leaſt neere enough, for to finde out of the aforeſaid Tables, how much the North-ſtarre ſtandeth higher or lower then the pole. If it be higher, you muſt deduct it off, if it be lower, you muſt adde it to the obſerved height, and ſo is the right height of the pole found.

Theſe foreſaid Tables are calculated onely from tenne to tenne degrees, and whereas you

you are moſt betweene ſuch heights, you ſhal (when you come in other heights) conſider how many degrees you are either aboue or under theſe calculated limits, and alſo how great the difference is betweene two ſuch limits, having obſerved that, you muſt take of that difference, according to the height that you are in, more or leſſe of the aforeſaid numbers, deducting or adding the ſame, as the matter ſhall require.

1. Example.

In the height of 46 degrees, I deſire to know how much the North ſtarre ſtandeth too low, when the Guardes ſtand in the eaſt, conſidering how great the difference is betweene the height of 40 and 50 degrees, I finde 5 minutes increaſing, I ſay therefore: 10 degrees difference in height giue 5 minutes, what ſhall 6 degrees giue? facit 3 minutes, that being added to the one degree 39 minutes, which I finde in the Table for the 40 degrees (becauſe that the difference from 40 to 50 degrees is increaſing) I finde ſo one degree 42 minutes.

2. Example.

In the height of 48 degrees, I deſire to knowe, how much the North ſtarre ſtandeth too high, when as the northermoſt Pointer ſtandeth in the eaſt, the difference in the Table, between 40 and 50 degrees height is 14 minutes decreaſing, I ſay therefore, 10 degrees difference in height giue 14 minutes, what ſhall 8 degrees giue? facit 11 minutes great, that being deducted from 38 minutes, ſtanding for the height of 40 degrees, (becauſe that the difference of 40 to 50 deg. decreaſeth) I finde 27 min. that the North ſtarre in the foreſaid height of 48 degrees ſtandeth too high.

CHAP. XXVIII.

Of the Elevation of the Celeſtiall Lights, by reaſon of the vapours.

IT is known by experience, that the Sun Moone, & all the ſtarres comming more and more neare the Horizon, doe alſo more and more ſeeme to be higher then they are indeede, the cauſe thereof men doe hold to be, the vapours, which continually (by reaſon of the warmth of the water & moyſtures of the Earth) doe ariſe from the earth, the which the nearer they are the Horizon the thicker they are, & thereby cauſe the Lights to ſeeme to be the more elevated. The nearer alſo that men come to the Pole, the greater are thoſe vapours, and thereby the Elevation of the Celeſtiall Lights aboue their places, is the greater. The famous Aſtronomer Ticho Brahe hath by his exact ſearching in his Climate, in the Latitude of 55 degrees 56 minutes found them, as theſe Tables following doe ſhewe.

A table of the Sunnes Elevation.

The Sun high	0 degrees	ſeemeth 34 minutes	higher then properly indeede he is.
	1 degree	ſeemeth 26 minutes	
	2 degrees	ſeemeth 20 minutes	
	4 degrees	ſeemeth 15 minutes	
	7 degrees	ſeemeth 13 minutes	
	10 degrees	ſeemeth 10 minutes	
	16 degrees	ſeemeth 7 minutes	
	23 degrees	ſeemeth 3 minutes	
	32 degrees	ſeemeth 1 minute.	

A table of the Starres Elevation.

The Starres high	0 degrees	ſeeme 30 minutes	higher then properly indeed they are.
	1 degree	ſeeme 22 minutes	
	2 degrees	ſeeme 15 minutes	
	4 degrees	ſeeme 11 minutes	
	7 degrees	ſeeme 8 minutes	
	11 degrees	ſeeme 5 minutes	
	15 degrees	ſeeme 3 minutes	

The vſe of the foreſaid Tables of Elevation.

IF you obſerue the Altitude or height of the Sunne aboue the Horizon leſſe then 32 degrees, you ſhall deduct ſo much, as the Table in the number of the obſerved height ſheweth: If you obſerue the diſtance of the Sunne from the Zenith more then 58, you ſhall on the contrarie adde ſo much, as the Table againſt the Complement to 90 from the obſerved diſtance from the Zenith ſheweth. The Sunne being more then 40 degrees aboue the Horizon, and 50 degrees from the Zenith, then theſe Elevations are diſſolved and vaniſht quite away.

1. Example.

I obſerue the Altitude of the ſunne aboue the Horizon 4 degrees, the Table of the Elevation of the ſunne, sheweth me the Sunne to ſeeme to be 15 minutes higher then indeed he is, I deduct then the 15 minutes from mine obſerved height, and I keepe for the true height of the Sunne 3 degrees 45 minutes.

2. Example.

I obſerue the diſtance of the ſunne from the Zenith 74 degrees, the Complement thereof to 90 is 16, againſt it in the Table of the ſunne I finde 7 minutes, adding them to the obſerved diſtance, I finde ſo for the right diſtance of the ſunne 74 degrees 7 minutes.

Like as hath been ſaid of the Sunne, according to the Table of the Sunne, ſo you muſt do with the ſtarres, according to the Table of the Starres.

1. Example.

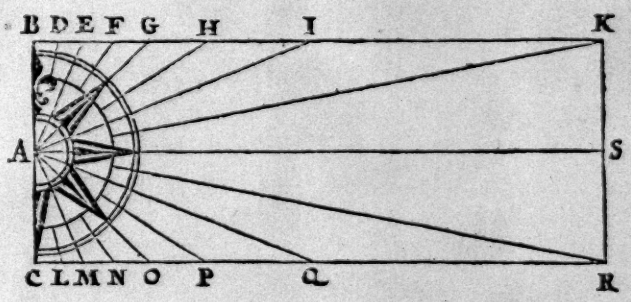
I obſerue in the north at the loweſt the height of the Middlemoſt Horſe of the great Wayne 7 degrees aboue the Horizon, I finde againſt it in the Table of the Starres 8 minutes, which being deducted from the obſerved height, I keep for the true height 6 degrees 52 minutes.

2. Example.

I obſerue the diſtance from the Zenith of the Star called the Great Dogge 86 degrees, the Complement whereof to 90 is 4, againſt it I finde in the Table 11 minutes, which being added to the obſerved diſtance, I finde 86 degrees 11 minutes.

CHAP. XXIX.

How many leagues ſayling upon any one point of the Compaſſe will raiſe or lay a degree of Latitude.



VPon the point of ſouth or north, as from A to B or C you ſaile for a degree — — 20 leagues. and you keep ſtill the ſame Meridian.

Upon the point of north and by eaſt, or ſouth and by eaſt, as from A to D or L, you ſaile for a degree — 20¼ leagues, and then you are departed from your firſt Meridian from whence you are ſailed, as from B to D — — 4 leagues.

Northnortheaſt & ſouthſoutheaſt, as from A to E or M for a degree 21⅓ leagues. and your diſtance from the firſt Meridian, as from B to E — 8 leagues.

Northeaſt and by north and ſoutheaſt and by ſouth, as from A to F or N 24 leagues, and diſtance from the firſt Meridian, as from B to F is — — 13½ leagues.

North-

Northeaſt and ſoutheaſt you ſayle for a degree, as from A to G and O 28 leagues. and diſtance from the firſt Meridian from whence you are departed, as from B to G, or from C to O — 20 leagues

Northeaſt and by eaſt, and ſoutheaſt & by eaſt, as from A to H or P for a degree 36 leag. and diſtance from the firſt Meridian, as from B to H or C to P — 30 leagues.

Eaſtnortheaſt or eaſtſoutheaſt as from A to I or Q for a degree — 52⅓ leagues. and then you are departed from the firſt Meridian, as frō B to I or from C to Q 48⅓ leag.

Eaſt and by north, or eaſt and by ſouth, as from A to K or R for a degree 103 leagues. and then you are departed from your firſt meridian, as frō B to K or frō C to R 100 leag.

But if you ſaile eaſt or weſt, as from A to S then you remaine ſtill in one paralell or Latitude, and neyther raiſe or laye the pole.

CHAP. XXX.

Of the Variation of the Compaſſe.

THE Needle or the ſteele under the Compaſſes, touched with the Loadeſtone, tryeth at divers places diverſly, at ſome places right towards the north, at other places it doeth varie towards the eaſt, and at ſome other places towards the weſt. As for example, By the Ilands of Corvo and Flores, (the weſtermoſt of the Azores Ilands) By Helmſhuy a little by weſt the North cape. About 40 leagues weſtwards from the ſouth point of Spitſberghen. To the Eaſtwards of the Cape de bona Eſperance, at the Cape das Aguilhas, and at more places, aſwell in the East as Weſt Indies, the needle touched ſheweth or pointeth right north. Weſtwards from the Azores Ilands, To the eaſtwardes of the North cape, At Nova Zembla, On the coaſte of Spitsberghen, and to the eaſtwards of the Cape das Aguilhas in the whole Indies ſea, it ſheweth or pointeth frō the north weſtwards: and to the eaſtwards of the Azores Ilands, By weſt the Cape de Bona Eſperance, and other more places, it pointeth from the north eaſtwards. The Variation of the needle is then of two kindes, to wete, from the north to the weſtwards, which we call weſting, or northweſting, & from the north to the eaſtwards, which we call eaſting or northeaſting. Each of them is alſo of two kindes, to wete increaſing or decreaſing northeaſting: and likewiſe increaſing and decreaſing northweſting. Increaſing Northeaſting or Northweſting, is that which increaſeth when as men doe ſayle from the weſt towards the eaſt, and decreaſing Northeaſting or Northweſting, which doth then decreaſe.

The ſame may be more plainly underſtood by this or ſuch like

1. Example.

If you ſaile from the Ilands Corvo and Flores, (where the Needle pointeth right) on eaſtwardes towards the Coaſte of Spaine: the needle beginneth (& by litle and litle more and more) to decline off from the north towards the eaſt, untill that you ſaile to the Longitude of the Straite of Gibraltar, where it is at the higheſt (as men doe hold) 13 degrees, that is, increaſing northeaſting. From thence ſayling forth alongſt the Mediterraen ſea, it beginneth to decreaſe, untill thwart of the mouth of the Golphe of Venice, where it goeth to nothing, & the Needle tryeth again right north, that is called decreaſing northeaſting.

2. Example.

If you ſaile from the Cape das Aguilhas, (where the Needle pointeth right North) on to the eaſtwards towardes the Indies, the Needle beginneth to varie off from the north toward the weſt, till that you come a litle to the eaſtwards of the Iland S. Brandaon, where it is at the higheſt 22 degrees, or two whole pointes, that is increaſing northweſting. From thence ſayling forth it beginneth to decreaſe, untill thwarte of the ſouth point of Celebes, where the needle tryeth again right north, this is called decreaſing northweſting.

For the common Navigation from theſe parts to the Eaſtcountrie, to the Northwards, England and France or Spaine, the ſteeles are made faſt under the Flye of the Compaſſe, (for to cauſe the Flowre de Luce to pointe right north) about two third parts of a point from the north towards the Eaſt. The courſes and lyings of the one land to the other in the common Seacardes of theſe coaſts, are alſo made after ſuch Compaſſes, ſo that you may ſaile unto theſe places by them, without that you need to alter the Compaſſes, or to make any other reckoning thereupon.

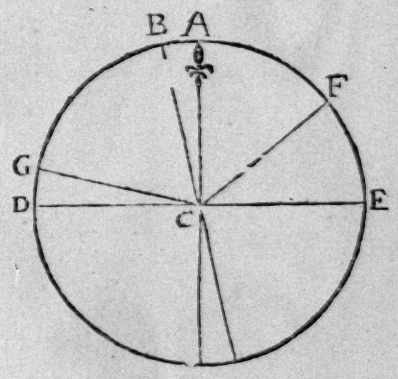
In farr or long voyages over the great Sea, where the Needle doth varie ſometimes towards the weſt, and then ſometimes towards the

the eaſt a pointe or two or more, it is verie needful to look verie warily unto it, as wel towards what ſide, as how much it pointeth frō the north, for to be aſſured what courſe you make good in ſayling.

For to find the miſpointing or variation of the Needle, you muſt ſeek firſt the right north (for to compare the variation of the Needle by it) after divers manners. You muſt ſet with a compaſſe, (which hath the Needle & floure de luce one right over the other) the Sunne in the morning when he riſeth, & in the euening whē he ſetteth: If ſo be that both the ſettings of the ſunne by the compaſſe, doe fall equally diſtant frō the north or ſouth, then the Cōpas or the Needle pointeth right north, without any variation. If the ſunne riſing be nearer the North then the Sun ſetting, the variation is from the north towards the eaſt, and you haue northeaſting. If the riſing be farther from the north then the ſetting, the variation is from the north towards the weſt, and you haue northweſting.

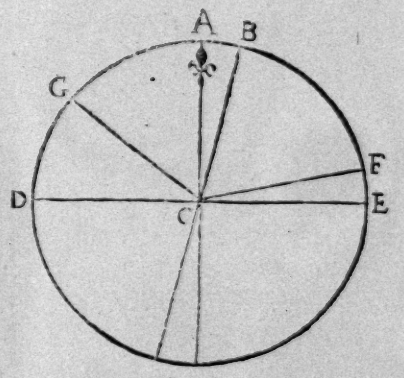
1. Example.

Let the riſing of the Sunne be at F from E to the northwards of the eaſt 40, that is from A the north 50 degrees, the ſetting at G from D to the northwards of the weſt 10, that is from A the north 80 degrees, the arch G A F maketh then 130 degrees, which being divided into two parts at B, ſo that G B and B F each of them are 65 degrees, B is then the right North point (in the middeſt betweene the riſing and ſetting of the ſunne) that Compaſſe pointeth then from B to A 15 degrees towards the Eaſt, or if you deduct the leſſer ſetting by the compaſſe from the weſt D G 10, from the greater ſetting by the Compaſſe from the eaſt E F 40, and the overplus 30 divide into two parts, there commeth 15 equal to B A the northeaſting.



2. Example.

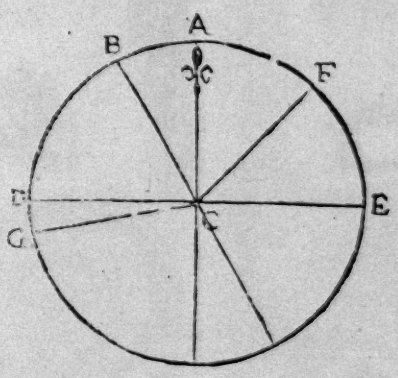
Let the riſing of the Sunne be at F 80 degrees from the north toward the eaſt, the ſetting at G 60 degrees towards the weſt, the arch G A F conteyneth then 140 degrees, which being divided into two partes at B, ſo that G B and B F each of them conteyne 70 degrees, B is then the right north pointe 10 degrees to the eaſtwardes of the floure de Luce, the Floure de Luce or Needle then pointeth 10 degrees from the true north towards the weſt. Or if you deduct the leaſt ſetting by the Compaſſe from the eaſt 10, from the moſt from the weſt 30, and the overplus 20 divide into two parts, there commeth 10 equall to A B the northweſting of the Needle.



If the riſing doe happen to the ſouthwards of the eaſt, and the ſetting to the ſouthwards of the weſt, the ſelfe ſame courſe is to be uſed towards the ſouth, as hath been ſayd in the former examples towards the north.

3. Example.

Suppoſe F be the riſing diſtant from E the eaſt 40 and from A the north 50 degrees, G the ſetting from D the weſt towardes the ſouth 16, or from the north A 106 degrees, the arch G D A F is then 156 degrees, which being divided into two parts, as before at B, ſo that G B and B F each of them conteyne 78 degrees, B ſhall then be the true north pointe 28 degrees to the weſtwards of the Needle, which pointe th then 28 degrees from the north towardes the eaſt. Or if you adde the leaſt ſetting by the Compas to the ſouthwards of the weſt 16, to the moſt ſetting by the Compas to the northwards of the eaſt 40, and divide that number into two parts) there commeth 28, equall to the northeaſting of the Needle.



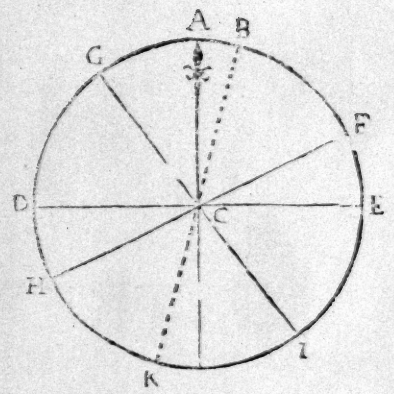
Out of theſe former examples, are plainly enough to be underſtood all other accidents, which may happen unto any man in ſetting of the riſing and going down of the Sun.

If it happen that you can not ſee the Sun at the riſing & ſetting by reaſon of the thicknes of the aire, you may ſet it before & after noon upon one height, and doe as before is ſaid.

Example.

Foure or fiue houres before noone (the nearer the riſing the better) I obſerue with a Croſſe ſtaf or Aſtrolabie the Height of the ſunne aboue the Horizon 10 degrees, and withall ſette the ſunne with a dyall over the Compaſſe, or with a hanging ſtring, and find the ſhadowe of the ſtring at G, 40 degrees from the

north towards the weſt, ſo that I C G ſignifieth the ſhadow; that I note for memorie, and tarrie until after noone, that the ſunne is again declined to the ſame height as before of 10 deg. & I ſee where the ſhadow of that hanging ſtring then pointeth, the which I ſuppoſe it be at F 60 degr. from A the north, ſo that H C F doth ſignify the ſhadow. The arch G A F 100 degrees, being devided into two equall parts at B, ſo that G B and B F each of them conteyn 50 degrees, the point B is the true north point, the needle varieth then from the north, from B to A towards the weſt 10 degrees, & euen ſo with all other ſuch accidents.



In ſuch manner you may obſerue in the forenoone two, three, foure or more times, as for example, the firſt time, when the ſunne is 5 degrees high. The ſecond 8 or 10, the third 12, or 15, or more; and after noone againe at the like heights: ſo you ſhall finde how the one agreeth with the other, & if you alwaies finde one ſame north point, you may be the more aſſured that you haue wel obſerued. This is hereby to be conſidered, that the farther from the noone, and the nearer the riſing and ſetting of the ſunne you make ſuch obſervations, the more certaine they are, & the more you may truſt unto them, becauſe that the ſunne comming neare to the Meridian, doth alter but little in height, and yet differeth much by the Compaſſe.

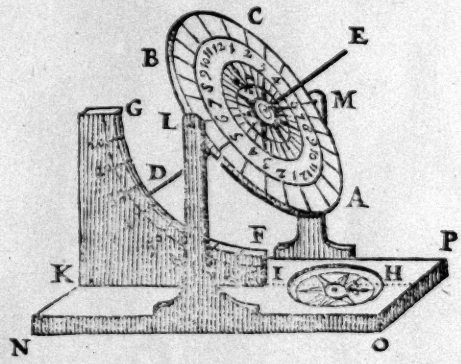
CHAP. XXXI.

Of the Tydes.

IT is known by common experience, that the floud and ebbe are governed by the moone, and alſo that with every new and full moone the flouds do flow higher then ordinarie, which are called Spring-tydes, and at the quarters of the moone Neape-tydes, ſo that we do know with ſufficient certainty before hand, by former experience (although the true cauſes thereof yet are unknown unto men) the houre of tides to come, & upon what pointe the moone maketh high water at each ſeverall place, to the great help and benefit of Navigation.

We haue added hereunto the Tables of the tydes, according to the cõmon uſe, to wit, by each point of the Compaſſe, all the knowne places, where the moone being upon ſuch a point maketh high water. Or upon what point the moone muſt be, whenas at theſe places ſet together, it maketh high water or full ſea.

For to know upon what point the moon is, is done two manner of waies by ſetting it by the Compas, or by reckning, according to the age of the moone, & the hour of the day. The ſetting according to any pointe, may not be done, with a cõmon flat driuing compaſſe, by reaſon that it doth onely devide the Horizon into equall points, & ſheweth in what vertical circle or Azimuth the ſunne or moone ſtand, but with a Compas, which (being elevated according to the ſuperficies of the Equinoctial) divideth the equinoctial ſo likewiſe into equal parts, as the cõmon flat driving compas doth divide the horizon. Such an Equinoctial compas is of faſhion, as here ſtandeth pourtrayed: wherof the wheele A B C ſheweth the ſuperficies of the Equinoctial, the wyre E D the axeltree of the world. The foreſaid wheele muſt be marked on both ſides, as well under as aboue, within with a compas, on the out ſides with twiſe 12 hours, & right againſt the eaſt & weſt at L & M muſt ſo hang upon two pinnes



as upon an axeltree, that it may be turned up & down, & the wire at the under end at D on the quadrãt F D G may be ſet upon al heights of the pole. If then you ſet ſuch a Compaſſe with the under bottom levell, the line H K right north & ſouth, to wit H to the north, & K to the ſouth, & the under ende of the wire right againſt ſuch a degree on the Quadrante F G, as the height of the pole, that you finde your ſelf in: then ſhal the wheele A B C ſtand equal with the ſuperficies of the true Equinoctiall, and the wire E D with the axeltree of the world. The ſetting by ſuch a one, or a common Compas giveth great difference, the nearer the Equinoctial the greater, as may be underſtood by the examples following.

1. Example.

1. Example.

In the height of 50 deg. or thereabouts, the Sun being in the beginning of Cancer at his greateſt declination to the north, by a common Compas commeth not before half an hour after ſeuen of the clock to the eaſt, and at half an houre after foure to the weſt: that is, he goeth from the eaſt through the ſouth to the weſt in nine houres, but from the weſt through the north, until again in the eaſt in 15 houres.

2. Example.

In the height of 30 degrees, he cometh a litle before half an houre paſt 9 of the clock to the eaſt, and a litle after halfe an houre paſt two of the clock in the weſt, and ſo goeth in leſſe then fiue houres and a halfe from the eaſt through the ſouth to the weſt, but from the weſt through the north until againe in the eaſt he goeth more then 18 houres.

3. Example.

The Dragons head being in the beginning of Aries, and the moone in the beginning of Cancer, she maketh then fiue degrees more declination then the Sun, and paſſeth through there in the foreſaid height of 30 degrees more then one houre ſooner from the eaſt to the weſt, then the Sun, to wete, in about foure houres, and againe from the weſt to the eaſt in about 20 houres.

Being under the Lyne, and the ſun having no declination he ariſeth in the morning right in the eaſt, & riſing continueth eaſt until that he goeth over our heads through the Zenith into the weſt, and continueth ſtill going downe weſt, untill he commeth againe to the Horizon, and ſo is according to a flat driving Compaſſe, the one half day eaſt and the other weſt, without coming upon any other point, It is not ſo with this kinde of Equinoctiall Compaſſe. The ſunne and moone both goe alwaies alike time over everie one pointe of the Compaſſe, to wete, from the eaſt to the ſouth 6 houres, from the ſouth to the weſt 6 houres, and from the weſt through the north againe to the eaſt in twiſe 6 houres.

Example.

Being under the Line & the Sun in the Equinoctial I ſet the end of the wire E right north, the other ende D to the ſouth, to the upper edg of the quadrant at G upon o, the wire E D ſhal then lye level, euen with the water, like the axeltree of the world, and the wheele ſhall be right perpendicular overende, like as the true Equinoctial there. The ſunne comming up aboue the Horizon, the ſhadow of the wire upon the wheele ſhal point upon the eaſt, and upon the ſixth houre further aſcending he riſeth over the edge of the wheele, & divideth it with the ſhadow, in the like time into equall parts: being 45 degrees high aboue the horizon, the ſhadow of the wire ſhal point upon the ſoutheaſt and 9 houre, being aſcended up into the Zenith, the ſhadow ſhal ſtand right perpendicular downwards upon the ſouth & the 12 houre, being againe deſcended 45 degrees, (that is halfe waies to the weſt) the ſhadow ſhall ſtand upon the ſouthweſt, and the 3 houre after noone, but comming to the horizon, the ſhadow ſhall ſtand upon the weſt and the 6 houre. Like as this hath ben ſaid of the ſun, the ſame is alſo to be underſtood, (for ſo much as concerneth the points) in like manner of the moone.

For to reckon it according to the time or age of the moon, to that end are placed in the Tables following under each point, two collumnes of numbers, the firſt are the dayes of the age of the moone, or the daies paſt after the change or full of the moon, the ſecond are the hours & minutes of the ſame day, in which the moone cometh to that point, & at the places there annexed maketh high water.

Example.

Eight dayes after that the Moone is new or full, I deſire to know when it cometh to be ſouth, or when it maketh high water at Emden, Enchuyſen, & the like places, (where a north and ſouth moone maketh full ſea) I ſeeke under the point of north and ſouth in the firſt column the 8 day, and finde againſt it in the ſecond columne 6 houres 24 minutes. Vpon that day then ſhall the moone at 6 of the clock and 24 minutes come to be north and ſouth, and at ſuch places make high water.

The tyde cometh later everie day 48 minutes, that is foure fift parts of an houre: If a man know then at what houre the new or full moone maketh full ſea at any place, lett him from that day forth reckon everie daye four fift parts of an houre later, and ſo he ſhall finde the right time of high water.

Example.

When the moone is new or full it is at Amſterdam, Rotterdam, (and at everie place where a ſouthweſt and northeaſt moone maketh full ſea) high water at three of the clock, one day after the new or full moone at 3 of the clock and 48 minutes. Two dayes after it at 4 of the clock and 36 minutes, & foure dayes after the new or full moone at 6 of the clock and 12 minutes.

TABLES OF THE TYDES.

South, and North.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	12	0	At the Ilands of Iutland.	From the Nes to Bolleigne.
1	12	48	Before the Hever, Eider & Elue.	
2	1	36	At Emden & Delfziel. Before	
3	2	24	Enchuysen, Horne & Vrck. On	
4	3	12	al the coasts of Flanders, at the	
5	4	0	Northforland, at Dover in the	
6	4	48	Pier, at Beachy on the shore.	
7	5	36	at Hampton at the Kay. Before	
8	6	24	Sherbrough and the Race of	
9	7	12	Blanchey. At Orfordnes. In	
10	8	0	the Condado. At Gibraltar in	
11	8	48	the roade.	
12	9	36		
13	10	24		
14	11	12		
15	12	0		

Southsouthweſt, and Northnortheaſt.

da.	ho.	mi.		Setting of the Tydes upon the same point.
0	1	30	Vnder Holy land. Before the	From Callice to Bolleigne.
1	2	18	Maſe and Goree. Before Ter-	
2	3	6	Veer. At Armuyen. Vpon the	
3	3	54	Flat. The Wielings. On the	
4	4	42	Coasts of Sealand.	
5	5	30	Before the Thames of London,	
6	6	18	Before Yarmouth.	
7	7	6	In Downes Roade.	
8	7	54	Thwart of the Dongie Neſſe.	
9	8	42	At the weſt end of Wight.	
10	9	30	Without Callice & Blacknes.	
11	10	18	In Bluet.	
12	11	6	At Bellile on the land.	
13	11	54		
14	12	42		
15	1	30		

South and by weſt, and North and by eaſt.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	12	45	Within the Maes.	From Bolleigne to the Somme. Alſo from Staples to toBolleign.
1	1	33	Within Terveer.	
2	2	21	At Flushing.	
3	3	9	Thwart of Beach in the offing,	
4	3	57	In the Cammer of Rye.	
5	4	45	At Winchelſee.	
6	5	33	In Garnſey.	
7	6	21		
8	7	9		
9	7	57		
10	8	45		
11	9	33		
12	10	21		
13	11	9		
14	11	57		
15	12	45		

Southw. & by ſouth, & Northe. & by north.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	2	15		Between Calice & Dover From Dunkerck to Graveling. From Staples to Fecam. From Dortmouth to Exmouth.
1	3	3	VVithout Fontenay.	
2	3	51	VVithout Bluet.	
3	4	39	Vnder Bellile.	
4	5	27	Before the VVielings.	
5	6	15	Before the Maeſe.	
6	7	3		
7	7	51		
8	8	39		
9	9	27		
10	10	15		
11	11	3		
12	11	51		
13	12	39		
14	1	27		
15	2	15		

Southweſt, and Northeaſt.

da.	ho.	m		Setting of the Tydes upon the same point.
0	3	0	At Amſterdã Rotterdã, Dort,	Frõ C. de Hague to Alderney. through the Race of Alderney. From Garnzey to the Caskets. Frõ Milford to Ramſey.
1	3	48	and Zierickzee. Before Newcaſtle.	
2	4	36	In Robbinhoods bay. Before the Tees	
3	5	24	and Hartlepoole. Without the Flemiſh	
4	6	12	Bancks. In the Strait between Callice	
5	7	0	and Dover. Before Conquet. The	
6	7	48	Pennes, Groy, Armentiers, Vſe, Bil-	
7	8	36	lats, Porthus, the River of Bordeaux,	
8	9	24	the ſouth coaſt of Bretaigne, Gaſ-	
9	10	12	coigne and Poictou, The coaſts of	
10	11	0	Biſcay, Galicia, Portugall and of	
11	11	48	Spaine.	
12	12	36	On the weſt coaſt of Ireland.	
13	1	24	At Boecknes and Orcaneys.	
14	2	12	In Hitland and Fayrehul.	
15	3	0		

Southweſt & by weſt, & Northeaſt & by eaſt.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	3	45	Betweē the Heads & the Maſe.	From Struysart to Deep From the Lizart to the Steart. From Cape Cleer unto Londey.
1	4	33	At Roan. In Silly. Before S.	
2	5	21	Matthews point. In Breſt and	
3	6	9	Croydon. In the Sound be-	
4	6	57	tween Vshant and the Mayn.	
5	7	45	Before the Boſſe.	
6	8	33	At S. Martens. Before Rochell,	
7	9	21	Before Brouwage, at Royan in	
8	10	9	the River of Bordeaux. VVith-	
9	10	57	in the hauens on the coaſtes of	
10	11	45	Spaine, Portugall, Gallicia,	
11	12	33	the ſouth ſide of Bretaigne,	
12	1	21	Gaſcoigne, and the weſt coaſt	
13	2	9	of Ireland.	
14	2	57		
15	3	45		

Weſtſouthweſt, and Eaſtnortheaſt.

da.	ho.	m.		Setting of the Tides upon the same point.
0	4	30	From the Teſſell to the Heads	From Oſtend to S. Katherins. From Barchſleur to Struyſart. The Broade ſounde out and in. From C. Cleere to the Iland Saltees. Betvveene Londey and the Holmes unto Briſtovv. From Silly to the Lindsend of England. From the Steart to Portland.
1	5	18	in the fareway.	
2	6	6	Before the Hommer.	
3	6	54	Before Flambrough and Scar-	
4	7	42	brough. Abberwrack. In Fal-	
5	8	30	mouth. In Mouſehole. Setlles.	
6	9	18	S. Pauls without the hauen.	
7	10	6	Between Garnzey and Setlles	
8	10	54	in the fareway. In the Broad-	
9	11	42	ſound. VVithout the Fourne.	
10	12	30	Al the Southcoaſts of Ireland,	
11	1	18	as Kinſael, Corck, Iochul, wa-	
12	2	6	terford, and Cape Cleere.	
13	2	54		
14	3	42		
15	4	30		

Weſt & by ſouth, and Eaſt and by north.

da.	ho.	m.		Setting of the tides upon the same point.
0	5	15		From the Ile of bas to the Fourne. From the Dorſeys to Cape Cleere. From Silly to the Lizard. From Portland to Wight. From Wight to Beachy.
1	6	3	In Torbay and Dortmouth.	
2	6	51	In Plymmouth and Foy.	
3	7	39	In the Sea of VVales.	
4	8	27	In Falmouth.	
5	9	15	In Milford.	
6	10	3	At Ramſey in VVales.	
7	10	51	Thwart of Londey.	
8	11	39	Before Lin in England.	
9	12	27	In al the hauens upõ the ſouth	
10	1	15	coaſt of Ireland.	
11	2	3		
12	2	51		
13	3	39		
14	4	27		
15	5	15		

West and East.

da.	ho.	m.		Setting of the Tides upon the same point.
0	6	0	Before Hamburgh.	
1	6	48	Before Bremen.	
2	7	36	Before the Marsdeep or Tessel.	Frō the Casquets to Berchfleur.
3	8	24	At Hull.	
4	9	12	At Bla keney and Wels.	
5	10	0	Before Anwerpe.	
6	10	48	Ter Goes.	
7	11	36	At Concallo & S. Malloes.	
8	12	24	S. Powles in the hauen.	
9	1	12	Without Silly in the chanel.	From the Lands ende of England to the Lizart.
10	2	0		
11	2	48		
12	3	36		
13	4	24		
14	5	12		
15	6	0		

West and by north, & East & by south.

da.	ho.	m.		Setting of the tides upon the same point.
0	6	45		
1	7	33		
2	8	21		
3	9	9	Betweene Foye & Falmouth in the channel.	From the Ile de Bas to Marwanen alongst the land.
4	9	57	At Bristow at the Kaye.	
5	10	45	Before S. Nicholas & Podessemske.	
6	11	33	At VVaymouth at theKaye.	
7	12	21		
8	1	9		
9	1	57		
10	2	45		
11	3	33		
12	4	21		
13	5	9		
14	5	57		
15	6	45		

Westnorthwest, and Eastsoutheast.

da.	ho.	mi.		Setting of the Tydes upon the same point
0	7	30	At the Nes by VVieringhen.	
1	8	18	In the roade of Tessel.	
2	9	6	At Kilduyn.	
3	9	54	Amidst the chanel in the farewaie.	From the Iland Bryack to S. Malloes.
4	10	42	Thwarte of the Steart in the Channell.	
5	11	30	Betweene Mousehole & Falmouth in the offing.	From Berchfleur unto Seynhead.
6	12	18	Thwart of Plimmouth in the offing.	
7	1	6	At the Lizart on the land.	
8	1	54		
9	2	42		
10	3	30		
11	4	18		
12	5	6		
13	5	54		
14	6	42		
15	7	30		

Northwest & by west, & southeast & by east.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	8	15		
1	9	3	VVithout the Caskets in the channell.	
2	9	51	Thwarte of VVight in the channel.	Behind Garnsey in the Fareway.
3	10	39	From Wight to Beachie by the Land.	Without the Seuē Ilands.
4	11	27	On the coast bywest the Forland.	
5	12	15	Without the Flye.	
6	1	3		
7	1	51		
8	2	39		
9	3	27		
10	4	15		
11	5	3		
12	5	51		
13	6	39		
14	7	27		
15	8	15		

Northwest, and Southeast.

da	ho.	m.		Setting of the Tydes upon the same point.
0	9	0	Before the Easter and Wester Eemses.	
1	9	48	Before the Flye. Before the Scholbalgh. On al the coasts of Friesland. Vpon the Frize & VVieringer Flat.	In the bay of Benvijt.
2	10	36		
3	11	24		
4	12	12		
5	1	0		
6	1	48	Before Cromer, VVinterton, and Yarmouth.	Betweene Morlaix & the Triacle pottes.
7	2	36		
8	3	24	VVithin the Seyne.	
9	4	12	At the east ende of VVight.	
10	5	0	In the Race of Portland.	
11	5	48	Betweene Garnsey and the Caskettes.	
12	6	36		
13	7	24		
14	8	12		
15	9	0		

Northw. & by north, & southeast & by south.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	9	45		
1	10	33	The Needles of VVight.	
2	11	21	In the channell thwarte of VVight.	
3	12	9	The Caskets.	Before Concallo.
4	12	57	Thwart of Garnzey in the Chanell.	Before the Iland of S. Michiel in the Bay.
5	1	45	Thwart of Leystaffe & Yarmouth without the banks.	
6	2	33	Ter Gouwe.	
7	3	21	At Dunnose of VVight.	
8	4	9		
9	4	57		
10	5	45		
11	6	33		
12	7	21		
13	8	9		
14	8	57		
15	9	45		

Northnorthwest, and Southsoutheast.

da.	ho	m.		Setting of the Tydes upon the same point.
0	10	30	At Orfordnes and Harwich without the banks.	
1	11	18	At Leystaf in the roade. Yarmouth in the roade. Before the Thames of London.	From Berchfleur to Alhonga.
2	12	6	At VVight within.	From C. Dorsey to the Iland Dardan.
3	12	54	At Bolloigne Deep & Seynehead.	
4	1	42	In the Fosse of Caen.	
5	2	30	At Struysart & all the coaste of Normandie and Picardie.	
6	3	18	At S. Ellens & the Cowes.	
7	4	6		
8	4	54		
9	5	42		
10	6	30		
11	7	18		
12	8	6		
13	8	54		
14	9	42		
15	10	30		

North & by west, and South & by east.

da.	ho.	m.		Setting of the Tydes upon the same point.
0	11	15		
1	12	3	Between Cripple sand & the Creyl.	
2	12	51	At Orfordnes within.	From S. Mathewes point to theBakeouens.
3	1	39	At Hampton. At Portsmouth and at Dunnose.	
4	2	27	At the Cowes in VVight.	From Fontenay toSaint Mathewes pointe.
5	3	15	Before the hauen of Caen.	
6	4	3	VVithin the Thames of London.	
7	4	51		
8	5	39		
9	6	27		
10	7	15		
11	8	3		
12	8	51		
13	9	39		
14	10	27		
15	11	15		

CHAP. XXXIII.

For to finde the age of the Moone.

FOR to finde the age of the Moone without an Almanack the Epact of the yeare must be knowne, which is found out of the Golden number, and the Golden number thus. See how many yeares are past since the yeare of our Lord 1500, devide them by 19, that which is the remainder is the Golden number of that yeare, if there remain nothing, then the Golden number is 19.

Example.

I desire to knowe the Golden number of the yeare 1628, setting the 1500 yeares aside, I devide the 128 by 19, I finde 6 times, and that there remaineth 14, the Golden number of the yeare 1628 then is 14.

The Golden number increaseth everie year with the beginning of the yeare, with one, as in the year 1629 it shall be xv. in the yeare 1630, xvj. and so forth unto xix, and then again j. ij. iij. &c.

The Epact changeth everie year upon the first day of March, increasing by 11, and that to 30, If it be more then 30, you must leaue the 30, & that which remaineth is the Epact. The Epact is found out by the Golden number thus. Count the Golden number upon the three joints of your thumb, beginning with 1 at the lowest joynt, unto the Golden number of your propounded year, if that the counting ende at the lowest joynt, the Epact and the Golden number are alike, if it ende at the second joint, adde 10, if at the third, adde 20 to the same Golden number, that number then is the Epact of that yeare.

Example.

I desire to know the Epact for the yeare 1628, the Golden number is 14, counting upon the three joyntes of the thumb, beginning with 1 at the lowest joynt, the counting endeth with 14 at the middlemost joynt, adding therefore 10 to 14, the Golden number, I haue 24 for the Epact of that yeare.

According to the Old stile, the Golden number is all one, as according to the New stile, but the Epact is 10 more, therefore, if you adde 10 to the Epact of the Newstile, you haue the Epact for the old stile, as for the year 1628, 10 to 24 (the Epact of the New stile) maketh 34, the 30 being taken away, remaineth 4 for the Epact of that year, according to the Old stile.

For to finde the Epact without reckoning, when as the Golden number is known, as wel for the old, as for the new stile, behould this table following, where they are set one against the other.

Golden number.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Newe Epact.	1	12	23	4	15	26	7	18	29	10	21	2	13	24	5	16	27	8	19
Olde Epact.	11	22	3	14	25	6	17	28	9	20	1	12	23	4	15	26	7	18	29

The Epact being knowne, adde it to the number of the moneths past off from March, to the month that you are in, including both months, if that bring out togethers just 30, then it is new moone the first day of that month: so much as it is lesse then 30, so manie daies there are yet to the new moone.

Example.

In the yeare 1630 I desire to know when it shall be new moone, in the moneth of August: the Epact of that yeare is 16, adding thereto 6 for the number of the months past off from March, (the month August being counted therein) maketh 22, so that there wanteth 8 of 30, the new moone then shall be 8 dayes afterward, that is upon the 8 of August.

The Epact, the number of the months from March off, and the day of the Month being added together, that number (or what it bringeth out more then 30) sheweth the age of the Moone.

Example.

For to knowe the age of the Moone upon the 12 of August 1630, I adde the Epact 16 to 6, the Months past from March, and 12 for the twelfth day, make together 34, the 30 taken away, there remaineth 4 for the age of the Moone upon that day. All this is to be understood according to the New stile.

For the easier finding out of the time of the New moone, without any reckoning, we haue added hereunto an Almanack for tenne yeares, following one after the other, calculated for the Meridian of Amsterdam, shewing the day and houre of everie new & full moone, together with each quarter of the same: The use whereof is after this manner.

manner. Under the Moones againſt each moneth ſtand two Columnes of Cyfers, the firſt ſheweth the day of the moneth, the ſecond the houre and minute of the new or full moone, to reckon from the midday of that day, to the midday of the day following, according to the cuſtome, or uſe of the Aſtronomers.

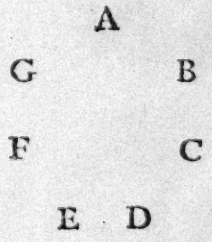
Example.

In the yeare 1630, I would know upon what day and houre the new Moone ſhall be, in the Month Iulie, I ſeeke therefore in that yeare the Month Iuly, and finde new moone the 9 day 16 houres and 50 minutes: counting forth from that midday 16 houres and 50 minutes, that commeth to the next daye, the tenth in the morning at foure of the clock and 50 minutes after midnight.

For to knowe what daye of the weeke that is, the Dominicall letter of that yeare muſt firſt be knowne, and with what letter each moneth beginneth. The Dominical letters are to be found under every yeares Almanack, the Leape yeares haue two, the firſt whereof is uſed untill the 25 of Februarie, and the other foorth on unto the end of the yeare, and everie moneth beginneth with ſuch a letter, as this Table following ſheweth.

Ianuarie	beginneth with	A
Februarie		D
March		D
Aprill		G
May		B
Iune		E
Iulie	beginneth with	G
Auguſt		C
September		F
October		A
November		D
December		F

Seeing then that Iulie beginneth with a G you ſhal therefore beginne to tell in the Circle of Letters hereunder at G, and forth rounde about to 10, that falleth upon B, that is the third day after F the Sundayes letter of that year, it ſhall be then Wedneſday. And ſo with all the other. In the Leape year, you muſt tell both the 24 and 25 upon the F, becauſe that the 25 day is alſo added therein with an F, as the 24 is.



Almanack for the yeare 1625. New ſtile.

	Maen.	da.	ho. mi.
Ianuarie.	laſt quarter	1	11 - 31
	new moone	18	9 - 28
	firſt quarter	15	2 - 25
	full moone	23	1 - 19
	laſt quarter	31	2 - 46
Februarie.	new moone	6	19 - 46
	firſt quarter	13	16 - 52
	full moone	21	20 - 23
March.	laſt quarter	1	14 - 28
	new moone	8	5 - 40
	firſt quarter	15	9 - 20
	full moone	23	13 - 37
	laſt quarter	30	22 - 36
Aprill.	new moone	6	15 - 51
	firſt quarter	15	3 - 12
	full moone	22	3 - 55
	laſt quarter	29	5 - 9
May.	new moone	6	2 - 31
	firſt quarter	13	21 - 37
	full moone	21	15 - 11
	laſt quarter	28	10 - 25
Iune.	new moone	4	14 - 0
	firſt quarter	12	15 - 13
	full moone	20	0 - 12
	laſt quarter	26	16 - 5
Iulie.	new moone	4	2 - 45
	firſt quarter	12	6 - 56
	full moone	19	7 - 47
	laſt quarter	25	23 - 8
Auguſt.	new moone	2	17 - 19
	firſt quarter	10	20 - 19
	full moone	17	15 - 13
	laſt quarter	24	8 - 42
Septemb.	new moone	1	9 - 27
	firſt quarter	9	7 - 17
	full moone	15	23 - 12
	laſt quarter	22	11 - 39
October.	new moone	1	2 - 18
	firſt quarter	8	16 - 36
	full moone	15	8 - 38
	laſt quarter	22	14 - 34
	new moone	30	18 - 42
Novem.	firſt quarter	7	1 - 6
	full moone	13	19 - 55
	laſt quarter	21	11 - 20
	new moone	29	10 - 0
December.	firſt quarter	6	9 - 21
	full moone	13	9 - 50
	laſt quarter	11	9 - 32
	new moone	28	23 - 35

The Golden number of this yeare is 11. The Circle of the Sun 10. The Dominical letter E. Roman Indiction 8. the Epact 21. from the Nativitie of Chriſt to Shroue ſunday ſixe weekes and foure dayes. Quadrageſima the 16 of Februarie. Eaſter the 30 of March Aſcenſion day May the 8. Whitſunday the 18 of May. Advent the 30 of November. Foure Eclipſes ſhall happen this yeare, two of the ſunne, and two of the moone, whereof the two of the ſunne, & the laſt of the Moone ſhall not be ſeene in theſe partes. The firſt of the moone ſhall be the 24 of March in the morning, an houre and halfe after midnight.

Almanack for the yere 1626. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	first quarter	4	17	50
	full moone	12	1	40
	laſt quarter	20	6	27
	new moone	17	11	27
Februarie.	first quarter	3	3	24
	full moone	10	19	44
	laſt quarter	19	0	19
	new moone	25	22	0
March.	first quarter	4	14	32
	full moone	12	14	20
	laſt quarter	20	14	0
	new moone	27	7	11
April.	first quarter	3	3	35
	full moone	11	7	38
	laſt quarter	19	0	13
	new moone	25	15	37
May.	first quarter	2	18	45
	full moone	10	22	42
	laſt quarter	18	7	27
	new moone	25	0	0
Iune.	first quarter	1	11	37
	full moone	9	11	15
	laſt quarter	16	12	56
	new moone	23	9	27
Iulie.	first quarter	1	5	8
	full moone	8	22	0
	laſt quarter	15	17	45
	new moone	22	20	40
	first quarter	30	22	18
Auguſt.	full moone	7	7	11
	laſt quarter	13	23	13
	new moone	21	10	20
	first quarter	29	14	18
Septemb.	full moone	5	15	55
	laſt quarter	12	6	50
	new moone	20	2	18
	first quarter	28	4	41
October.	full moone	5	0	33
	laſt quarter	11	18	9
	new moone	19	19	53
	first quarter	27	17	29
Novem.	full moone	3	9	46
	laſt quarter	10	9	12
	new moone	18	13	51
	first quarter	26	4	32
December.	full moone	2	20	12
	laſt quarter	10	4	20
	new moone	18	7	25
	first quarter	25	13	53

The Golden number of this year is 12. The Circle of the Sun 11. The Dominical letter D. Roman Indiction 9. the Epact 2 from the Nativitie of Chriſt to Shrouesunday eight weekes and three dayes. Quadrageſima the 1 of March. Eaſter the 12 of April. Aſcenſion day the 21 of May. Whitſunday the 31 of May. Advent the 29 of November.

Three Eclipſes ſhall be ſeen this yeare, two of the ſunne, and one of the moone, whereof that of the moone (but very litle) ſhal onely be ſeene above the Horizon of theſe Netherlands the ſeuenth of Auguſt, at eight of the clock in the eueninge, the other of the Sunne ſhall happen without our Horizon.

Almanack for the yeare 1627. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	full moone	1	8	44
	laſt quarter	9	9	53
	new moone	16	23	16
	first quarter	23	22	3
	full moone	30	23	8
Februa.	laſt quarter	7	23	29
	new moone	15	12	41
	first quarter	22	5	55
March.	full moone	1	15	11
	laſt quarter	9	19	20
	new moone	16	23	37
	first quarter	23	14	31
	full moone	31	7	48
April.	laſt quarter	8	11	3
	new moone	15	8	18
	first quarter	22	0	32
	full moone	30	0	9
May.	laſt quarter	7	23	35
	new moone	14	15	45
	first quarter	21	12	41
	full moone	29	15	31
Iune.	laſt quarter	6	8	30
	new moone	12	22	57
	first quarter	20	2	40
	full moone	28	5	43
Iulie.	laſt quarter	5	14	57
	new moone	12	7	7
	first quarter	19	18	40
	full moone	27	18	30
Auguſt.	laſt quarter	3	20	1
	new moone	10	17	1
	first quarter	18	12	9
	full moone	26	5	56
Septemb.	laſt quarter	2	1	11
	new moone	9	4	47
	first quarter	17	6	36
	full moone	24	16	30
October.	laſt quarter	1	7	59
	new moone	8	20	4
	first quarter	17	0	35
	full moone	24	1	59
	laſt quarter	30	17	36
Novemb.	new moone	7	13	27
	first quarter	15	16	44
	full moone	22	11	46
	laſt quarter	29	6	38
December.	new moone	7	8	33
	first quarter	15	6	32
	full moone	21	22	12
	laſt quarter	28	23	3

The Golden number of this yeare is 13. the Circle of the ſun 12. Dominicall letter C. Roman Indiction 10. the Epact 13. from the Nativitie of Chriſt to Shrouesunday 7 weeks 2 dayes. Quadrageſima the 21 of Februarie. Eaſter the 4 of April. Whitſunday the 23 of May. Advent the 28 of November. Four Eclipſes ſhall be ſeene this yeare, 2 of the ſunne & 2 of the moone, the firſt of the moone the 31 of Ianuarie, 1 houre before noon: the ſecond of the ſun the 16 of Februarie, an hour after our midnight, to the ſouthwards without our Horizon. The third of the moone, the 28 of July in the morning before 7 of the clock ſhall ſhew her ſelf in WeſtIndia. The 4 of the ſun Auguſt 11, at 5 a clock in the morning, far to the eaſtwards from us.

Almanack for the yeare 1628. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	new moone	6	3	53
	first quarter	13	17	31
	full moone	20	9	42
	laſt quarter	27	18	26
Februarie.	new moone	4	21	33
	first quarter	12	2	28
	full moone	18	22	8
	laſt quarter	26	15	8
March.	new moone	5	12	10
	first quarter	12	9	27
	full moone	19	11	28
	laſt quarter	27	11	35
April.	new moone	3	23	41
	first quarter	10	16	25
	full moone	18	1	26
	laſt quarter	26	5	21
May.	new moone	3	8	35
	first quarter	9	23	53
	full moone	17	16	12
	laſt quarter	25	19	56
Iune.	new moone	1	16	5
	first quarter	8	8	45
	full moone	16	7	32
	laſt quarter	24	7	0
	new moone	30	23	5
Iulie.	first quarter	7	19	41
	full moone	15	22	51
	laſt quarter	23	15	21
	new moone	30	6	31
Auguſt.	first quarter	6	9	30
	full moone	14	13	7
	laſt quarter	21	22	15
	new moone	28	15	23
Septemb.	first quarter	5	2	30
	full moone	13	3	6
	laſt quarter	20	4	14
	new moone	27	1	55
October.	first quarter	4	21	51
	full moone	12	15	25
	laſt quarter	19	11	17
	new moone	26	15	29
Novem.	first quarter	3	18	17
	full moone	11	3	5
	laſt quarter	17	19	41
	new moone	25	8	7
December.	first quarter	3	13	33
	full moone	10	14	11
	laſt quarter	17	6	26
	new moone	25	3	22

The Golden number of this Leape yeare is 14. The Circle of the Sunne 13. the Dominical letters B A. The Roman Indiction 11. the Epact 24. from the Nativitie of Chriſt to Shroue ſunday tenne weekes and one day. Quadrageſima the 12 of March. Eaſter the 23 of April. Whitſunday 11 of Iune. Advent the third daye of December.

There ſhall be fiue Eclipſes this yeare, three of the ſunne, and two of the Moone. The firſt of the Sunne the ſixt of Ianuarie, at three of the clock after noone, weſtwards without our Horizon. The ſecond of the moone, the 20 of Ianuarie, betweene eight and nine of the clock in the eueninge. The third of the Sun the firſt of Iulie, one houre before noone, ſhall be ſeen farr to the ſouthwards, by C. de bona Eſperance, and thereabouts. The fourth of the moone the 16 of Iulie, one hour before our noone, upon the other ſide of the earth. The fift of the Sunne, the 25 of December, about three of the clock after noone, ſhal be ſeene in the weſtermoſt parts of Africa, & in the Canaries and Azores Ilands.

Almanack

Almanack for the yere 1629. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	first quarter	2	6	6
	full moone	9	1	3
	laſt quarter	15	19	57
	new moone	23	23	16
	first quarter	31	19	26
Februarie.	full moone	7	11	36
	laſt quarter	14	12	27
	new moone	22	17	39
March.	first quarter	2	5	34
	full moone	8	21	57
	laſt quarter	16	7	10
	new moone	24	9	13
	first quarter	31	13	13
Aprill.	full moone	7	8	53
	laſt quarter	15	2	29
	new moone	22	21	54
	first quarter	29	19	14
May.	full moone	6	20	21
	laſt quarter	14	20	54
	new moone	22	7	54
	first quarter	29	0	45
Iune.	full moone	5	9	21
	laſt quarter	13	13	2
	new moone	20	20	16
	first quarter	27	7	6
Iulie.	full moone	4	23	44
	laſt quarter	13	2	40
	new moone	19	23	37
	first quarter	26	15	30
Auguſt.	full moone	3	15	8
	laſt quarter	11	14	0
	new moone	18	6	48
	first quarter	25	3	7
Septemb.	full moone	2	6	52
	laſt quarter	9	23	37
	new moone	16	14	46
	first quarter	23	18	51
October.	full moone	1	22	27
	laſt quarter	9	7	48
	new moone	16	0	34
	first quarter	23	13	34
	full moone	31	13	26
Novem.	laſt quarter	7	15	26
	new moone	14	13	12
	first quarter	22	10	40
	full moone	30	3	38
December.	laſt quarter	6	23	14
	new moone	14	4	44
	first quarter	22	7	52
	full moone	29	16	25

The Golden number of this year is 15. The Circle of the Sun 14. The Dominical letter G. Roman Indiction 12. The Epact 5. from the Nativitie of Chriſt to Shrouteſunday eight weekes and ſixe dayes. Quadrageſima the 4 of March. Eaſter the 15 of April. Whitſunday the 3 of Iune. Advent the 2 of December.

Three Eclipſes ſhall be ſeen this yeare, one of the moone and two of the Sunne. The firſt of the Moone the 9 of Ianuarie preſently after noone, ſhall be ſeene upon the other ſide of the earth. The ſecond of the Sun, the 21 of Iune, betweene 4 and 5 of the clock, ſhall be ſeene in the EaſtIndies. The third of the Sun the 14 of December about 4 of the clock after noone in Braſill, or thereabouts.

Almanack for the yeare 1630. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	laſt quarter	5	8	18
	new moone	12	22	37
	first quarter	21	3	11
	full moone	28	3	40
Februa.	laſt quarter	3	19	18
	new moone	11	17	31
	first quarter	19	19	11
	full moone	26	15	31
March.	laſt quarter	5	8	46
	new moone	13	11	50
	first quarter	21	7	20
	full moone	27	22	28
Aprill.	laſt quarter	4	0	16
	new moone	12	4	7
	firſt quarter	19	15	56
	full moone	26	7	29
May.	laſt quarter	3	17	8
	new moone	11	18	9
	first quarter	18	21	54
	full moone	25	17	11
Iune.	laſt quarter	2	10	32
	new moone	10	5	52
	first quarter	17	2	56
	full moone	24	4	11
Iulie.	laſt quarter	2	3	40
	new moone	9	15	30
	first quarter	16	7	38
	full moone	23	16	51
Auguſt.	laſt quarter	31	19	35
	new moone	7	23	45
	firſt quarter	14	14	24
	full moone	22	7	17
Septemb.	laſt quarter	30	10	36
	new moone	6	7	25
	first quarter	12	0	4
	full moone	20	23	27
	laſt quarter	28	23	28
October.	new moone	5	15	39
	first quarter	12	13	23
	full moone	20	16	51
	laſt quarter	28	10	10
Novemb.	new moone	4	1	21
	firſt quarter	11	6	25
	full moone	19	10	47
	laſt quarter	26	19	20
December.	new moone	3	13	10
	firſt quarter	11	2	43
	full moone	19	3	5
	laſt quarter	26	3	35

The Golden number of this yeare is 16. the Circle of the ſun 15. Dominicall letter F. Roman Indiction 13. the Epact 16. from the Nativitie of Chriſt to Shroueſunday 6 weeks 5 dayes. Quadrageſima the 17 of Februarie. Eaſter the 31 of March. Whitſunday the 19 of May. Advent the 1 of December. Four Eclipſes ſhall be ſeen this year upon the earth, 2 of the ſun and 2 of the moone. The 1 of the moone May 26, at 5 of the clock in the morning, ſhal ſhew it ſelf to the weſtward The 2 of the ſun the 10 of Iune about ſix of the clock in the euening. The 3 of the moone the 19 of Navem. between 10 and 11 of the clock in the euening. The 4 of the ſun, the 4 of December at one of the clock after midnight.

Almanack for the yeare 1631. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	new moone	2	3	4
	first quarter	10	0	44
	full moone	17	17	21
	laſt quarter	24	11	48
	new moone	31	18	42
Februarie.	first quarter	8	22	6
	full moone	16	5	14
	laſt quarter	22	21	1
March.	new moone	2	11	42
	first quarter	10	16	16
	full moone	17	15	9
	laſt quarter	24	7	20
Aprill.	new moone	1	4	44
	first quarter	9	6	22
	full moone	15	23	30
	laſt quarter	22	19	7
	new moone	30	21	29
May.	first quarter	8	16	26
	full moone	15	7	27
	laſt quarter	22	8	43
	new moone	30	13	42
Iune.	first quarter	6	23	33
	full moone	13	15	34
	laſt quarter	21	0	8
	new moone	29	1	57
Iulie.	first quarter	6	4	52
	full moone	13	0	34
	laſt quarter	20	17	23
	new moone	28	13	16
Auguſt.	first quarter	4	9	55
	full moone	11	11	22
	laſt quarter	19	10	22
	new moone	27	22	55
Septemb.	first quarter	2	15	54
	full moone	10	0	34
	laſt quarter	18	5	28
	new moone	25	8	40
October.	first quarter	1	23	44
	full moone	9	16	42
	laſt quarter	17	20	55
	new moone	24	17	30
	first quarter	31	10	45
Novem.	full moone	8	10	11
	laſt quarter	16	10	39
	new moone	23	3	34
	first quarter	30	1	26
December.	full moone	8	6	27
	laſt quarter	15	22	22
	new moone	22	14	31
	first quarter	29	20	1

The Golden number this yeere is 17. The Circle of the ſunne 16. Dominicall letter E. Roman Indiction 14. Epact 27. from the Nativity of Chriſt to Shroueſunday 9 weeks 4 dayes. Quadrageſima the 9 of March. Eaſter the 29 of April. Whitſunday the 8 of Iune. Advent Decem. 30. Foure Eclipſes ſhall be ſeen this yeere upon the earth, two of the ſun, and 2 of the moone. The firſt of the ſun the 1 of May about 3 houres before noone ſhal be ſeene of them which dwell farr to ſouthwardes. The 2 of the moone May 15, at 7 of the clock in the euening. The 3 of the ſun, the 25 of October, at 6 of the clock in the morning. The 4 of the moone the 8 of November at 12 of the clock at night.

Almanack

Almanack for the yere 1632. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	full moone	7	0	41
	laſt quarter	14	8	7
	new moone	21	2	33
	firſt quarter	28	17	19
Februarie.	full moone	5	16	24
	laſt quarter	12	16	30
	new moone	19	15	43
	firſt quarter	27	14	50
March.	full moone	6	5	25
	laſt quarter	13	0	0
	new moone	20	6	27
	firſt quarter	28	10	11
Aprill.	full moone	4	15	51
	laſt quarter	11	7	7
	new moone	18	22	1
	firſt quarter	27	2	4
May.	full moone	4	0	35
	laſt quarter	10	16	5
	new moone	18	14	0
	firſt quarter	26	14	19
June.	full moone	2	7	55
	laſt quarter	9	2	33
	new moone	17	5	25
	firſt quarter	24	23	43
Iulie.	full moone	1	14	54
	laſt quarter	8	15	47
	new moone	16	19	47
	firſt quarter	24	6	51
	full moone	30	22	29
Auguſt.	laſt quarter	7	7	45
	new moone	15	8	53
	firſt quarter	22	12	49
	full moone	29	8	0
Septemb.	laſt quarter	6	1	55
	new moone	13	21	10
	firſt quarter	20	18	41
	full moone	27	20	27
October.	laſt quarter	5	21	5
	new moone	13	8	37
	firſt quarter	20	1	33
	full moone	27	11	37
Novem.	laſt quarter	4	15	53
	new moone	11	19	37
	firſt quarter	18	10	52
	full moone	26	5	44
December.	laſt quarter	4	9	9
	new moone	11	6	10
	firſt quarter	17	23	24
	full moone	26	1	12

The Golden number this Leapyear is 18. The Circle of the Sun 17. The Dominical letters D C. Roman Indiction 15. The Epact 8. from the Nativitie of Chriſt to Shrouesunday eight weekes and three daues. Quadrageſima the 29 of Februa. Eaſter the 11 of April Whitſunday the 30 of May. Advent the 28 of November.

Foure Eclipſes come in this yeare, two of the ſunne, & 2 of the moone. the 1 of the ſun the 19 of April, aboute 2 hours before noone, not ſeen in theſe parts the 2 of the moone the 4 of May a little after noone. The 3 of the ſunne the 13 of October between 8 & 9 of the clock in the euening, without our horizon. The fourth of the moone the 27 of October, between 11 & 12 of the clock at night.

Almanack for the yeare 1633. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	laſt quarter	3	0	2
	new moone	9	16	32
	firſt quarter	16	15	39
	full moone	24	20	17
	laſt quarter	31	23	44
Februa.	new moone	8	3	14
	firſt quarter	15	10	25
	full moone	23	13	29
March.	laſt quarter	2	20	46
	new moone	9	14	0
	firſt quarter	17	6	11
	full moone	25	4	2
Aprill.	laſt quarter	1	3	14
	new moone	8	2	54
	firſt quarter	16	1	25
	full moone	23	15	39
	laſt quarter	30	9	4
May.	new moone	7	16	12
	firſt quarter	15	18	45
	full moone	23	0	46
	laſt quarter	29	15	26
June.	new moone	6	6	18
	firſt quarter	14	9	33
	full moone	21	8	46
	laſt quarter	27	23	14
Iulie.	new moone	5	21	0
	firſt quarter	13	21	47
	full moone	20	14	46
	laſt quarter	27	10	9
Auguſt.	new moone	4	12	8
	firſt quarter	12	7	23
	full moone	18	22	2
	laſt quarter	25	23	44
Septem.	new moone	3	3	26
	firſt quarter	10	15	8
	full moone	17	6	56
	laſt quarter	24	16	40
October.	new moone	2	18	23
	firſt quarter	9	21	56
	full moone	16	18	12
	laſt quarter	24	12	16
Novemb.	new moone	1	8	18
	firſt quarter	8	5	2
	full moone	15	8	15
	laſt quarter	23	9	20
	new moone	30	21	1
December.	firſt quarter	7	13	34
	full moone	15	0	55
	laſt quarter	23	5	43
	new moone	30	8	23

The Golden number of this yeare is 19. the Circle of the ſun 18. Dominicall letter B. Roman Indiction 1. the Epact 19. from the Nativitie of Chriſt to Shrouesunday 6 weeks 1 daye. Quadrageſima the 13 of Februarie. Eaſter the 27 of March. Whitſunday the 15 of May. Advent the 27 of Novemb.

There ſhall be but two Eclipſes this yeare in the world, and they of the ſunne, the firſt aboue our Horizon the eighth of Aprill, betweene two and three of the clock. The ſecond the thirteenth of October, betweene 6 and 7 of the clock in the morning ſhall be ſeene beſt in the Eaſt-Indies ſea, about the Ilands Mauricius, Maldivie, and thoſe places lying thereabouts.

Almanack for the yeare 1634. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	firſt quarter	6	0	13
	full moone	13	19	48
	laſt quarter	21	23	30
	new moone	28	18	53
Februarie.	firſt quarter	4	13	24
	full moone	12	14	45
	laſt quarter	20	13	6
	new moone	27	4	52
March.	firſt quarter	6	4	33
	full moone	14	8	54
	laſt quarter	21	23	8
	new moone	28	14	44
Aprill.	firſt quarter	4	21	28
	full moone	13	0	42
	laſt quarter	20	6	6
	new moone	27	0	44
May.	firſt quarter	4	15	29
	full moone	12	13	21
	laſt quarter	19	11	36
	new moone	26	11	30
June.	firſt quarter	3	9	31
	full moone	10	23	26
	laſt quarter	17	16	50
	new moone	24	23	18
Iulie.	firſt quarter	3	2	51
	full moone	10	7	38
	laſt quarter	16	22	58
	new moone	24	12	58
Auguſt.	firſt quarter	1	17	11
	full moone	8	15	7
	laſt quarter	15	7	9
	new moone	23	4	24
	firſt quarter	31	5	35
Septem.	full moone	6	22	53
	laſt quarter	13	18	18
	new moone	21	11	15
	firſt quarter	29	16	0
October.	full moone	6	7	39
	laſt quarter	13	9	18
	new moone	21	14	16
	firſt quarter	29	1	7
Novem.	full moone	4	18	1
	laſt quarter	12	4	15
	new moone	20	6	23
	firſt quarter	27	9	30
December.	full moone	4	6	33
	laſt quarter	12	2	5
	new moone	19	21	4
	firſt quarter	26	17	56

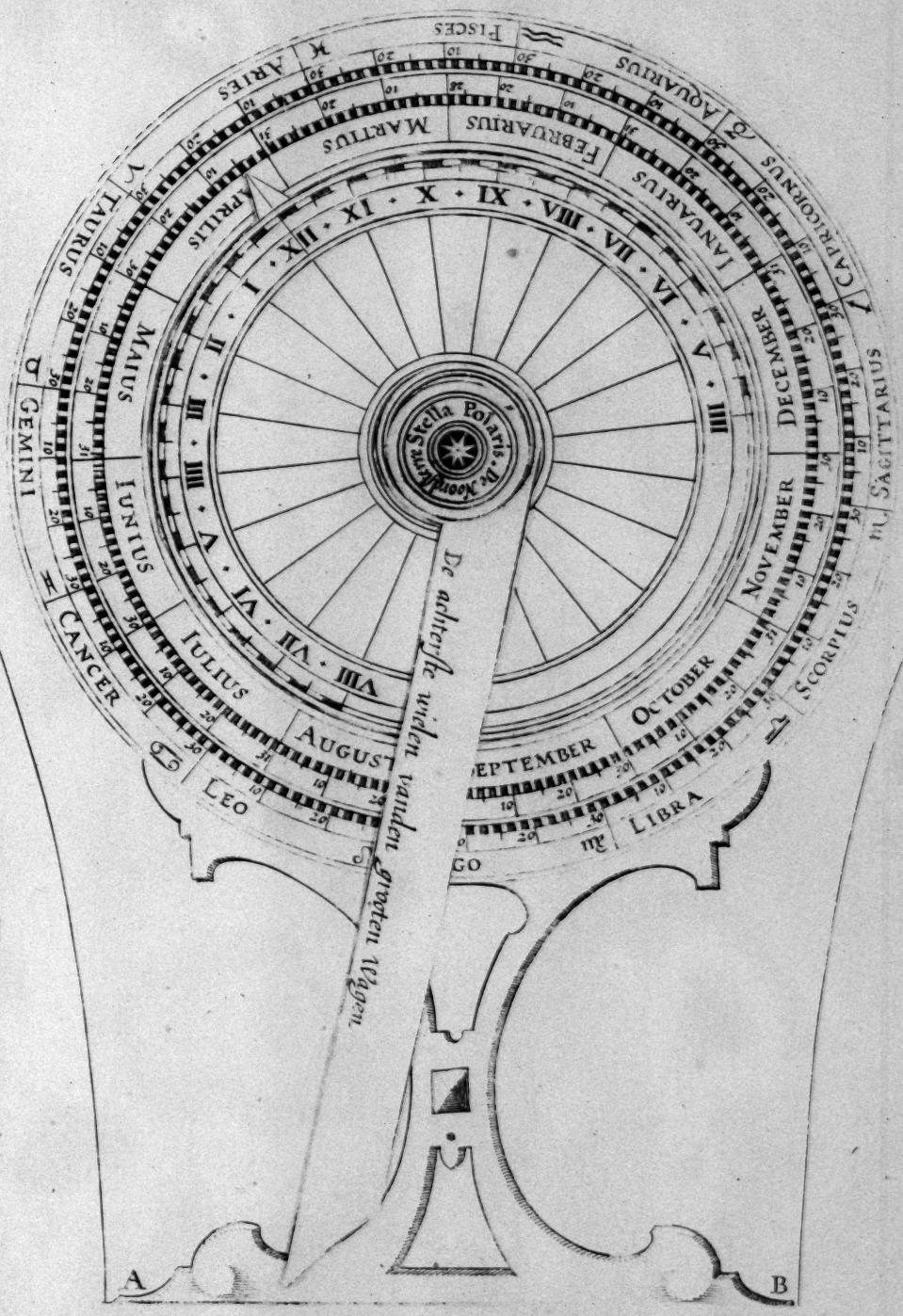
The Golden number this yeere is 1. The Circle of the ſunne 19. Dominicall letter A. Roman Indiction 2. Epact 1. from the Nativity of Chriſt to Shrouesunday nine weekes. Quadrageſima the 5 of March. Eaſter the 16 of April. Whitſunday the 4 of June. Advent Decem. 3. Foure Eclipſes ſhal be ſeen this yeere two of the ſun, and 2 of the moone. Whereof the firſt of the moone ſhall only be ſeene here in this land the 14 of March, at 8 of the clock in the euening. The 2 of the ſun the 29 of March in the morning at 4 of the clock after midnight. The third of the moone the 7 of Septem. an houre before noone. The 4 of the ſunne the 22 of September at 11 of the clock at night.

CHAP.

CHAP. XXXIII.

For to finde the houre of the day and night.

THE finding of the houre in al heights by day may be verie conveniently & surely done, by such an Equinoctial Compas, as standeth pourtrayed out in the xxxj Chapter of the Tydes. By night it may wel be found by a Night diall, as this figure: which hath two rounde bordes or plates, whereof the one is unmoueable, & the other moueable; upon the lower, which is unmoueable, stād the 12 signes of the Zodiack, against the monthes and dayes of the yeare. Vpon the moueable, the houres: this turneth, with also a Pointer (the one right side whereof answereth right upō the middle point) about a nayle with a hole or pipe, where you may see through. The use of the Night dyall is thus, You must set first the tooth of the twelfth hour on the moueable board or plate, on the day of the year upon the lowest unmoueable board or plate, & holde the Instrument on high, with the lowest edge of the foote A B right levell, so that you may see through the hole of the naile, the Northstar, turning thē the pointer upwards and downwards so long untill that the Pointers of the Charles Wayne come to the pointer, that being so, the pointer shall then shewe on the moueable boarde or plate, the true houre. If in steede of the Pointers of Charles Wayne you doe use the brightest of the Guardes, it shall be 4 houres 15 minutes later then the pointer shall shew, because that the aforesaid Pointers of Charles Waine doe goe so much time before the Guardes.



The houre may also be found by the right ascension of the sunne and of the starres, thus: when as you see any starre in the south, whose right Ascension is known, and you know also the right ascension of the sun, upon that daye, you shall substract the Sunnes ascension from the ascension of the Starre, that which remayneth thereof, devide into houres by 15, (for 15 degrees make an houre) which do shew the right houre of that time If the sunnes ascension be more then the Starres ascension, in such case you shall adde 360 degrees to the ascension of the starre, and then doe as is abouesaid.

1. Example.

Vpon the tenth of Aprill in the euening, I see in the south the Lyons Heart, whose right ascension is 147 degrees

Almanack for the yere 1632. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	full moone	7	0	41
	laſt quarter	14	8	7
	new moone	21	2	33
	firſt quarter	28	17	19
Februarie.	full moone	5	16	24
	laſt quarter	12	16	30
	new moone	19	15	43
	firſt quarter	27	14	50
March.	full moone	6	5	25
	laſt quarter	13	0	0
	new moone	20	6	27
	firſt quarter	28	10	11
Aprill.	full moone	4	15	51
	laſt quarter	11	7	7
	new moone	18	22	1
	firſt quarter	27	2	4
May.	full moone	4	0	35
	laſt quarter	10	16	5
	new moone	18	14	0
	firſt quarter	26	14	19
Iune.	full moone	2	7	55
	laſt quarter	9	2	33
	new moone	17	5	25
	firſt quarter	24	23	43
Iulie.	full moone	1	14	54
	laſt quarter	8	15	47
	new moone	16	19	47
	firſt quarter	24	6	51
	full moone	30	22	29
Auguſt.	laſt quarter	7	7	45
	new moone	15	8	53
	firſt quarter	22	12	49
	full moone	29	8	0
Septemb.	laſt quarter	6	1	55
	new moone	13	21	10
	firſt quarter	20	18	41
	full moone	27	20	27
October.	laſt quarter	5	21	5
	new moone	13	8	37
	firſt quarter	20	1	33
	full moone	27	11	37
Novem.	laſt quarter	4	15	53
	new moone	11	19	37
	firſt quarter	18	10	52
	full moone	26	5	44
December.	laſt quarter	4	9	9
	new moone	11	6	10
	firſt quarter	17	23	24
	full moone	26	1	12

The Golden number this Leapyear is 18. The Circle of the Sun 17. The Dominical letters D C. Roman Indiction 15. The Epact 8. from the Nativitie of Chriſt to Shrouesunday eight weekes and three dayes. Quadrageſima the 29 of Februa. Eaſter the 11 of April Whitſunday the 30 of May. Advent the 28 of November.

Foure Eclipſes come in this yeare, two of the ſunne, & 2 of the moone. the 1 of the ſun the 19 of April, aboute 2 hours before noone, not ſeen in theſe parts the 2 of the moone the 4 of May a little after noone. The 3 of the ſunne the 13 of October between 8 & 9 of the clock in the euening, without our horizon. The fourth of the moone the 27 of October, between 11 & 12 of the clock at night.

Almanack for the yeare 1633. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	laſt quarter	3	0	2
	new moone	9	16	32
	firſt quarter	16	15	39
	full moone	24	20	17
	laſt quarter	31	23	44
Februa.	new moone	8	3	14
	firſt quarter	15	10	25
	full moone	23	13	29
March.	laſt quarter	2	20	46
	new moone	9	14	0
	firſt quarter	17	6	11
	full moone	25	4	2
Aprill.	laſt quarter	1	3	14
	new moone	8	2	54
	firſt quarter	16	1	25
	full moone	23	15	39
	laſt quarter	30	9	4
May.	new moone	7	16	12
	firſt quarter	15	18	45
	full moone	23	0	46
	laſt quarter	29	15	26
June.	new moone	6	6	18
	firſt quarter	14	9	33
	full moone	21	8	46
	laſt quarter	27	23	14
Iulie.	new moone	5	21	0
	firſt quarter	13	21	47
	full moone	20	14	46
	laſt quarter	27	10	9
Auguſt.	new moone	4	12	8
	firſt quarter	12	7	23
	full moone	18	22	2
	laſt quarter	25	23	44
Septemb.	new moone	3	3	26
	firſt quarter	10	15	8
	full moone	17	6	56
	laſt quarter	24	16	40
October.	new moone	2	18	23
	firſt quarter	9	21	56
	full moone	16	18	12
	laſt quarter	24	12	16
Novemb.	new moone	1	8	18
	firſt quarter	8	5	2
	full moone	15	8	15
	laſt quarter	23	9	20
	new moone	30	21	1
December.	firſt quarter	7	13	34
	full moone	15	0	55
	laſt quarter	23	5	43
	new moone	30	8	23

The Golden number of this yeare is 19. the Circle of the ſun 18. Dominicall letter B. Roman Indiction 1. the Epact 19. from the Nativitie of Chriſt to Shrouesunday 6 weeks 1 daye. Quadrageſima the 13 of Februarie. Eaſter the 27 of March. Whitſunday the 15 of May. Advent the 27 of Novemb.

There ſhall be but two Eclipſes this yeare in the world, and they of the ſunne, the firſt aboue our Horizon the eighth of Aprill, betweene two and three of the clock. The ſecond the thirteenth of October, betweene 6 and 7 of the clock in the morning ſhall be ſeene beſt in the Eaſt-Indies ſea, about the Ilands Mauritius, Maldivie, and thoſe places lying thereabouts.

Almanack for the yeare 1634. New ſtile.

	Moone.	da.	ho.	mi.
Ianuarie.	firſt quarter	6	0	13
	full moone	13	19	48
	laſt quarter	21	23	30
	new moone	28	18	53
Februarie.	firſt quarter	4	13	24
	full moone	12	14	45
	laſt quarter	20	13	6
	new moone	27	4	52
March.	firſt quarter	6	4	33
	full moone	14	8	54
	laſt quarter	21	23	8
	new moone	28	14	44
Aprill.	firſt quarter	4	21	28
	full moone	13	0	42
	laſt quarter	20	6	6
	new moone	27	0	44
May.	firſt quarter	4	15	29
	full moone	12	13	21
	laſt quarter	19	11	36
	new moone	26	11	30
Iune.	firſt quarter	3	9	31
	full moone	10	23	26
	laſt quarter	17	16	50
	new moone	24	23	18
Iulie.	firſt quarter	3	2	51
	full moone	10	7	38
	laſt quarter	16	22	58
	new moone	24	12	58
Auguſt.	firſt quarter	1	17	11
	full moone	8	15	7
	laſt quarter	15	7	9
	new moone	23	4	24
	firſt quarter	31	5	35
Septemb.	full moone	6	22	53
	laſt quarter	13	18	18
	new moone	21	11	15
	firſt quarter	29	16	0
October.	full moone	6	7	39
	laſt quarter	13	9	18
	new moone	21	14	16
	firſt quarter	29	1	7
Novem.	full moone	4	18	1
	laſt quarter	12	4	15
	new moone	20	6	23
	firſt quarter	27	9	30
December.	full moone	4	6	33
	laſt quarter	12	2	5
	new moone	19	21	4
	firſt quarter	26	17	56

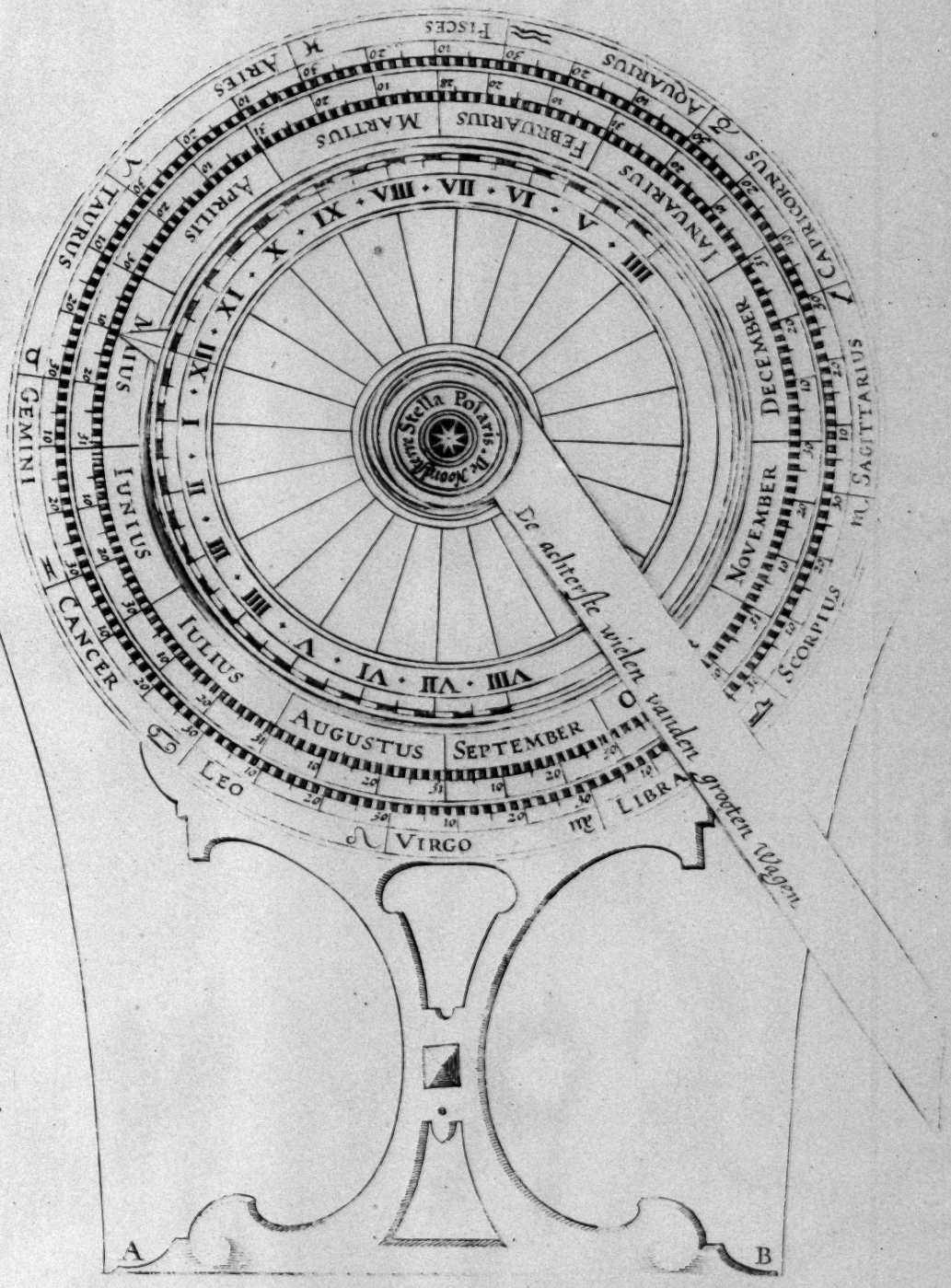
The Golden number this yeere is 1. The Circle of the ſunne 19. Dominicall letter A. Roman Indiction 2. Epact 1. from the Nativity of Chriſt to Shrouesunday nine weekes. Quadrageſima the 5 of March. Eaſter the 16 of April. Whitſunday the 4 of Iune. Advent Decem. 3. Foure Eclipſes ſhal be ſeen this yeere two of the ſun, and 2 of the moone. Whereof the firſt of the moone ſhall only be ſeene here in this land the 14 of March, at 8 of the clock in the euening. The 2 of the ſun the 29 of March in the morning at 4 of the clock after midnight. The third of the moone the 7 of Septem. an houre before noone. The 4 of the ſunne the 22 of September at 11 of the clock at night.

CHAP.

CHAP. XXXIIII.

For to finde the houre of the day and night.

THE finding of the houre in al heights by day may be verie conveniently & ſurely done, by ſuch an Equinoctial Compas, as ſtandeth pourtrayed out in the xxxj Chapter of the Tydes. By night it may wel be found by a Night diall, as this figure: which hath two rounde bordes or plates, whereof the one is unmoueable, & the other moueable; upon the lower, which is unmoueable, ſtād the 12 ſignes of the Zodiack, againſt the monthes and dayes of the yeare. Vpon the moueable, the houres: this turneth, with alſo a Pointer (the one right ſide whereof anſwereth right upō the middle point) about a nayle with a hole or pipe, where you may ſee through. The uſe of the Night dyall is thus, You muſt ſet firſt the tooth of the twelfth hour on the moueable board or plate, on the day of the year upon the loweſt unmoueable board or plate, & holde the Inſtrument on high, with the loweſt edge of the foote A B right levell, ſo that you may ſee through the hole of the naile, the Northſtar, turning the the pointer upwards and downwards ſo long untill that the Pointers of the Charles Wayne come to the pointer, that being ſo, the pointer ſhall then ſhewe on the moueable boarde or plate, the true houre. If in ſteede of the Pointers of Charles Wayne you doe uſe the brighteſt of the Guardes, it ſhall be 4 houres 15 minutes later then the pointer ſhall ſhew, becauſe that the aforeſaid Pointers of Charles Waine doe goe ſo much time before the Guardes.



The houre may alſo be found by the right aſcenſion of the ſunne and of the ſtarres, thus: when as you ſee any ſtarre in the ſouth, whoſe right Aſcenſion is known, and you know alſo the right aſcenſion of the ſun, upon that daye, you ſhall ſubſtract the Sunnes aſcenſion from the aſcenſion of the Starre, that which remayneth thereof, devide into houres by 15, (for 15 degrees make an houre) which do ſhew the right houre of that time If the ſunnes aſcenſion be more then the Starres aſcenſion, in ſuch caſe you ſhall adde 360 degrees to the aſcenſion of the ſtarre, and then doe as is aboueſaid.

1. Example.

Vpon the tenth of Aprill in the euening, I ſee in the ſouth the Lyons Heart, whoſe right aſcenſion is 147 degrees

degrees. The ſunnes right aſcenſion upon that daye is 19 degrees, which being deducted from the Aſcenſion of the ſtar, there remaineth 128 degr. which being devided by 15, I finde 8 houres and 8 degrees remayning over, and ſeeing 15 degrees make one houre, therefore everie degree maketh 4 minutes, the remayning 8 degrees, make 32 minutes of an houre, it ſhall then be late at that time 8 of the clock 32 minutes, to reckon off from the noone.

2. Example.

Vpon the 5 of November in the night, I finde in the ſouth the Starre *Aldebaran*, the ſouther eye of the Bull, whoſe right aſcenſion is 64 degrees, the Sunnes right aſcenſion upon that day is 220 degrees, the which is more then that of Aldebaran, therefore I adde to the aſcenſion of the ſtarre 360 degrees, which make 424 degrees, from which being deducted the ſunnes right aſcenſion 220, there remaineth 204 degrees, for the difference of time between the Sun and the ſtarre aforeſaid, which being devided by 15, there commeth 13 houres and 9 degrees remayning, which make 36 minutes, it is then 13 houres & 36 min. from the noone, that is one of the clock 36 minutes after midnight.

FOR to finde the right aſcenſion upon everie day of the yeare, as well of the ſunne as of the ſtarres, we haue hereunto annexed two tables, the one of the ſunne, ſhewing from fiue daies to fiue the Sunnes right aſcenſion, whereby the other foure daies between them are eaſily to be found. The other for 30 of the moſt notable fixed ſtarres, both onely by degrees, the ſame being enough to ſuffice for this purpoſe.

A table of the right Aſcenſion of the Sun.

The firſt number of ſiphers sheweth the day of the moneth, the ſecond the degrees of the Aſcenſion of the Sunne upon that day.

Ianuarie.		*Februarie.*		*March.*		*Aprill.*	
da.	degr.	da.	degr.	da.	degr.	da.	degr.
5 -	287	5 -	319	5 -	346	5 -	14
10 -	292	10 -	324	10 -	351	10 -	19
15 -	297	15 -	329	15 -	355	15 -	24
20 -	303	20 -	334	20 -	360	20 -	28
25 -	308	25 -	339	25 -	4	25 -	33
31 -	314	28 -	342	31 -	10	30 -	38

May.		*Iune.*		*Iulie.*		*Auguſt.*	
da.	degr.	da.	degr.	da.	degr.	da.	degr.
5 -	42	5 -	73	5 -	104	5 -	135
10 -	47	10 -	78	10 -	109	10 -	140
15 -	52	15 -	83	15 -	114	15 -	145
20 -	57	20 -	88	20 -	119	20 -	149
25 -	62	25 -	94	25 -	124	25 -	154
31 -	68	30 -	99	31 -	130	31 -	159

September.		*October.*		*November.*		*December.*	
da.	degr.	da.	degr.	da.	degr.	da.	degr.
5 -	164	5 -	191	5 -	220	5 -	251
10 -	168	10 -	195	10 -	225	10 -	257
15 -	173	15 -	200	15 -	231	15 -	263
20 -	177	20 -	205	20 -	236	20 -	268
25 -	182	25 -	210	25 -	241	25 -	274
30 -	187	31 -	215	30 -	246	31 -	281

A table of the right Aſcenſion of 30 of the moſt notable fixed ſtarres.

	degr.
THE girdle of Andromeda	12
The brighteſt in the head of the Ramme	27
The brighteſt in the mouth of the Whale *Mēkar*	41
The ſouther eye of the Bull *Aldebaran*	64
The left ſhoulder of Erichtonius, Capella	72
Orions left foot, *Regel*	74
Orions left ſhoulder.	84
The Great Dogge, *Syrius*	97
The norther head of the Twins	108
The ſouther head of the Twins	111
The little Dogge *Procyon*	110
The brighteſt of the VVaterſerpent, *Cor Hydræ*	137
Lyons heart *Regulus*	147
Lyons tayle	172
The right wing of the Virgin *Vindemiatrix*	191
Virgins Spike	196
The brighteſt in Bootes, *Arcturus*	210
South Ballance	218
North Balance	224
The brighteſt of the norther Crowne	230
Scorpions heart *Antares*	242
Hercules head	254
Serpentbearers head	259
Eagles tayle	282
The brighteſt in the Eagle, *Vultur*	293
The mouth of the Horſe Pegaſus	321
The bright ſtar in the end of the water of Aquarius *Fomahant*	339
The ſhaft of Pegaſus *Marcab*	342
The outermoſt in the wing of Pegaſus	358
The northermoſt in the VVhales tayle	360

ENDE.

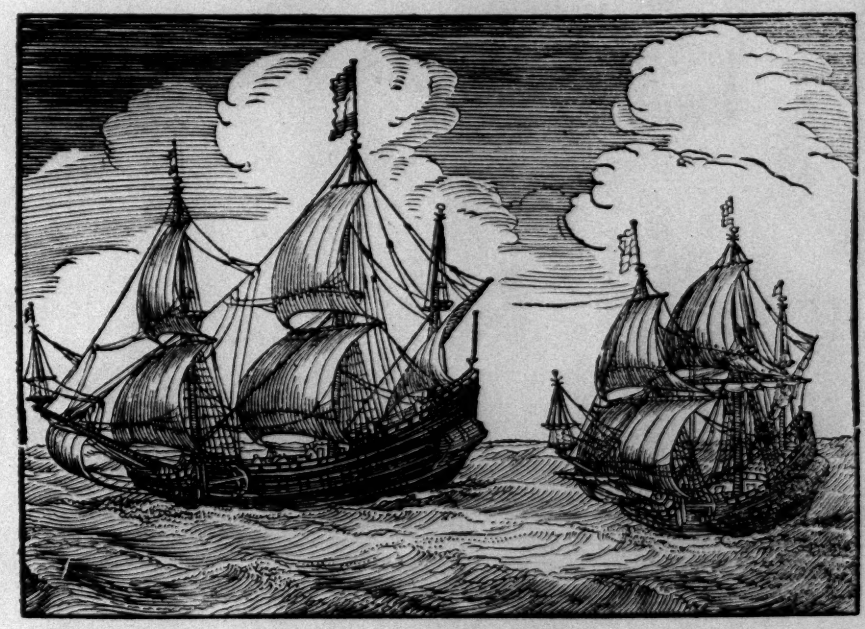
THE SECOND PART of the SEA-MIRROVR

Containing

A DESCRIPTION OF THE Seacoasts of the Easterne and Northerne Navigation;

COLLECTED AND COMPILED TOGETHER
Out of the Discoveries of many skilfull and expert Sea-men,
BY
WILLIAM IOHNSON BLAEUW;

And Translated out of *Dutch* into *English*, by
RICHARD HYNMERS.



AMSTERDAM,
Printed by WILLIAM IOHNSON BLAEVW, dvvelling upon the Water, by the Old Bridge, at the Signe of the Golden Sunne-Dyall. 1625.

Cum Privilegio.

Generale Paskaert vande Oosterſche Noordſche en Weſterſche Schipvaert.

AFRI-

CÆ

PARS.

EV

RO

Hiſpania

Vranckrijck

Nederlant

Engelant

Prunſſen

Italia

BARBARIEN

Duijtſche mijlen 15. in een graed.

Spaenſche mijlen 17½. in een graedt.

Roomſche en Fraenſche mijlen 20. in een graedt.

55 60 65 70 75

Ysland

Langenes

Faro

Ian Mayen Eylant

Schotlant

Hitlant

Feril

Bergen

Der mens Vlecker Mardzu Langefont

Aasloo

Iutland

NOORWEGEN

PRUSSEN

SWEDEN

Spitsbergen

Noortkaap

Lapplandt

Kibbina

Ruslant

C. Candenas

Cum Privilegio ad decennium —

1

Extract uyt de Privilegie.

DE *Staten Generael der Vereenichde Nederlanden, hebben getonſenteert ende geoctroyeert, conſenteren ende octroyeren midts deſen,* Wilhem Ianſz. Blaeuw, *Boeckverkooper binnen* Amſtelredam, *dat hy voor den tijdt van thien Iaren naeſtkomende, alleene inde Vereenichde Provincien ſal moghen drucken, doen drucken, uytgeven ende verkoopen ſeecker Boeck ghenaemt* ZEE-SPIEGEL, Inhoudende een korte Onderwyſinge inde konſt der Zeevaert, ende beſchryvinghe der Zee'n ende Kuſten van de Ooſterſche, Noordſche en Weſterſche Schipvaert.

Verbiedende alle ende een yeghelijck Ingeſetenen van deſe Landen, 't voorſz Boeck in't gheheel ofte ten deele in't groote ofte in't kleyne, in eenigherhande Tale ofte Sprake: midtſgaders de vermeerderinghe ofte verbeteringhen van tijdt tot tijdt daer by te doen, ende op het compendium van 't ſelve Boeck, gheintituleert Tafelen vande declinatie der Sonne, en voornaemſte vaſte Sterren, ende van't verſcheyden ghebruyck der Noordſterre, *nae te drucken, doen nae drucken, uytgeven, ende verkoopen, gheduerende den voorſz tijdt van thien Jaren naeſtkomende, ſonder des Suppliants conſent, by verbeurte vande voorſz naegedruckte Boecken, ende daerenboven vande ſomme van ſes hondert Carolus guldens, t'appliceren een derdendeel daer van tot behoef vanden Officier die de Calengie doen ſal, het tweede derdendeel tot behoef vanden Armen, ende het reſterende derdendeel tot behoef van den voorſz* Wilhem Ianſz Blaeuw. *Ghedaen ter vergaderinge van de Hoochgemelte Heeren Staten Generael. Jn's Gravenhaghe op den negenden Meert duyſent ſes hondert drientwintich.*

S. van Haerſolte. v.

Ter ordonnantie van de Hoochghemelte Heeren Staten Generael.

C. Aerſſens.

The ſecond parts

FIRST BOOKE

of the

SEA-MIRROVR

of the Eaſterne and Northerne

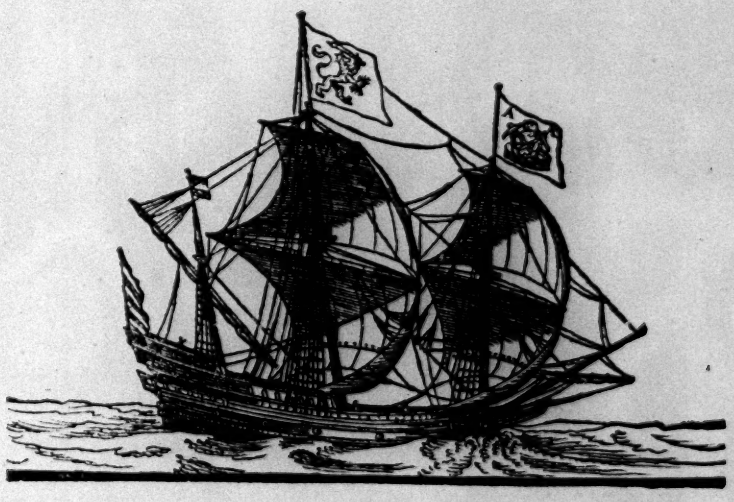
NAVIGATION.

Containing

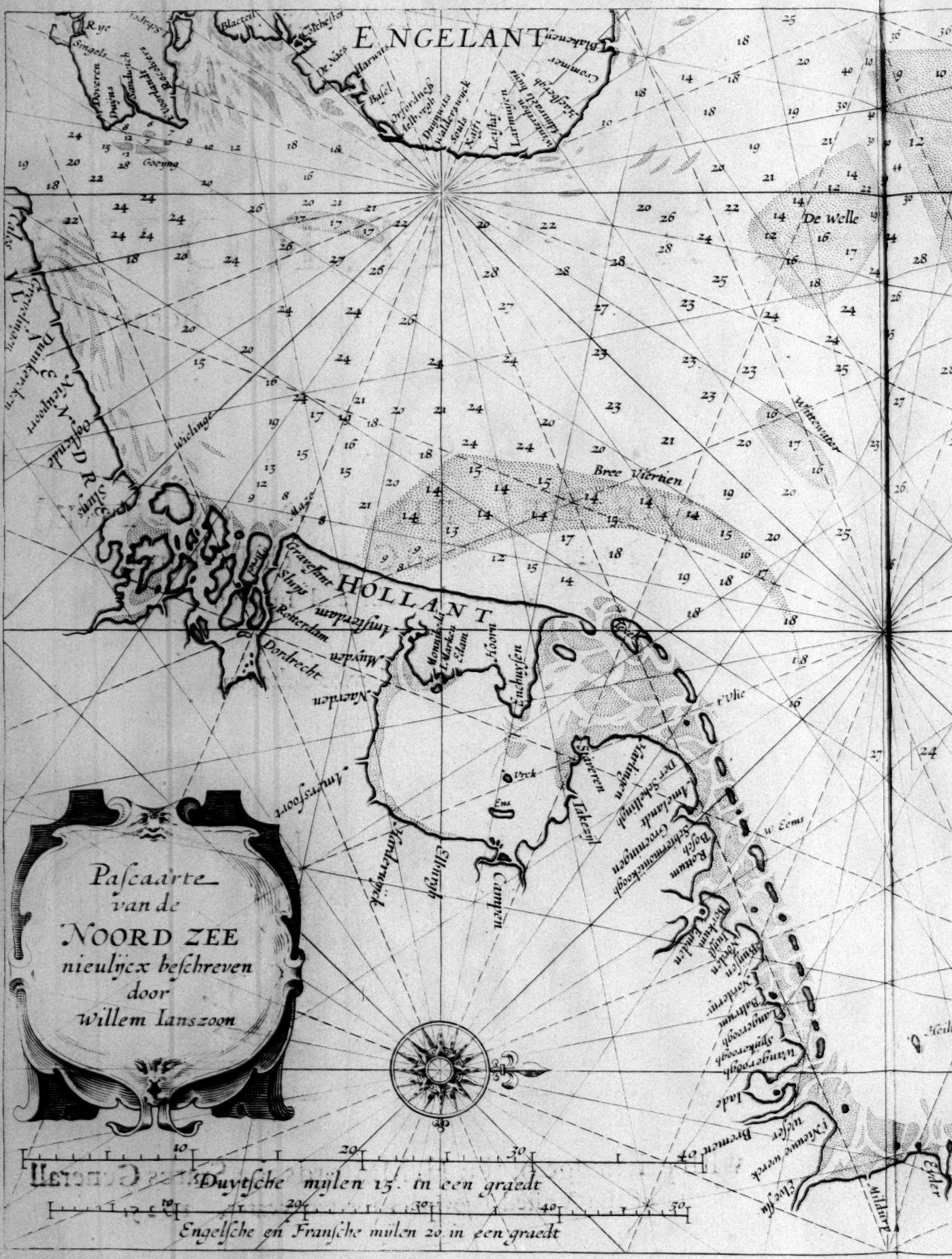
THE DESCRIPTION OF THE North Sea, and Coaſts of Holland,

Vrieſland, Holſt and Iutland.

From Amſterdam to Schagen.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.



Paſcaarte
van de
NOORD ZEE
nieulijcx beſchreven
door
Willem Ianszoon

Doggers banck

witte banck

Iutsche Rif.

Der Neus

Heiligelandt

Der Horn

Schelbinckreech

Rincopper diep

Rincopper

Troismond

Boesenbergen

Holmen

Rahlehuyt

Harrhals

Schagen

I. Phanu

I. Mum

Ripen

I. Rom

I. Silt

Londerre

I. Strant

Hever

Husum

Tonningen

Eyder

IUTLANDT.

Met Privilegie der E.E.H.M. Heere Staten generael voor thien jaren.

2

VRIESLANT

Harich
Mirnes
Warns
Cmeloirt
Cns
Vrck
't Val van Vrck
ton op de Hoffstede
Enckhuysche sandt
Houtrib
ton op de Creupel
Creupelsandt
Enck huſen
Broeckhort
Groote broeck
Latkebroeck
West Vriesland.
Leeck
Hem
Schellinchout
Hoorn
't Hoornicker hop
Scaerdam
Etersheim
Warder
Edam
Marcken
Vlielandt
De Gout Zee
Pascaart vande Zuijder Zee.
Monnikedam
Pampus
Vdam
WATERLANT
Durgerdam
Wracken
Buijckſloot
Barnde gat
Diemen
Amſterdam
HOL
Oude naerden
Naerden
Muijderbergh
't Slot
Muijden
Weesp
LANDT.
3
Duytſche mylen 15 in een graedt
Spaenſche mylen 17½ in een graedt
Eng. en Fr. mylen 20 in een graedt

Duitſche mijlen 15 in een graedt

Spaenſche mijlen 17½ in een graedt

Eng: en Fr. mijlen 20 in een graedt

Paſcaart vande Vlieſtroom.

VRIESLA

Franiker

Bollwaert

Arum

Pandragen

Wynaem

Pingum

Midlum

Harlingen

Koorwert

Mackum

Voorw

Swarte balgh

Middelgrondt

Lijthoeck

Dommeus of Mouſen plact

Bakens van Claes oomen

Breeſandt

't Oude Vlie

Vlielandt

Krakeſant

Monickeſloot

Vrieſche oſte Pompers Reede

Strt van Scherpingshals

Ierlandt

Langeſant

Vlieſtroom

N D T.

Vrck

Takezijl

Enchuyser sandt

Mirnes

Harich

Warns

Worcum

Dertwijsch

Hindelopen

't Clif

Staveren

Ton op de Hofstede

Noorder gat

Ton op de Creupel

Enchuÿsen

Ton inde Kolck

vrieße che plaet

Creupelsandt

Wagenpat

Grootebroeck

Lutkebroeck

Hem

Steenty van Breesant

Munnicke sandt

Sandt

Sunder ton ayt wiernger plaeck

Medenblick

Tuÿsck

4

Pappus

THE FIRST BOOK

of the

EASTERNE AND NORTHERN NAVIGATION.

Conteyning the Deſcription of the North Sea, from Amſterdam unto the Scaw or Schagen.

CHAP. I.

Of the Flye ſtreame.

Pampus.

FOR to ſaile from Amſterdam to the Fall of Vrck, you muſt keep the middle of the chanell in ſayling to Tyoort, and from thence over Pampus, with a ſhippe of greate draught, that draweth tenne foot or more, keepe Marcken church without to the land of Vdam, called Schyteldoecks hauen, ſo long untill that the ſteeple of Zuyderwouw come paſt Kinnigherbuert, which are the houſes half waies betwixt Schiteldoecks-hauen and Durgerdam, goe then towards the land eaſt, untill that the New church of Amſterdam come aboute Durgherdam, keepe that ſo ſtanding, untill that the church of Weeſp be come paſt the Houſe or Caſtle at Muyen, ſo that it doe ſtand ſomewhat nearer to Muyen then to the Houſe, keepe Weeſp ſtanding ſo, until that Edam come without the eaſt end of Marken. In this farewaie it is a foote deeper, then if you ſayled right through.

For to avoyde Muyen ſand: men were wont to bring the houſes which were wonte to ſtand upon Tyoort to the ſouthwards of the Heyligher-ſtee at Amſterdam, thereby you can make ſome reckoning, they are good longſt markes: when Monnickedam is aboute the weſt ende of Schytledoecks hauen, and the houſe at Muyen betwixt Weeſp and the church at Muyen, then are you thwart of Muyen ſand. For to ſaile right through over Pampus, then keepe the ſteeple of Diemen over or aboute the pointe of Tyoort, ſo long as you can ſee Tyoort, that is a right longſt marke for to ſaile over Pampus.

When you are come thwart of the eaſt ende of Marcken, goe then on northeaſt, or ſomewhat more eaſterly towards the Fall of Vrck, which is ſeuen leagues: when you are come within a great league of Vrck, you ſhall meete with a hard ſand, called the Houtribbe, lying ſoutheaſt and northweſt thwarte over the Farewaie, there is no more water upon it, then upon the Flat of Wieringhen, or of Freeſland, you ſhall finde alſo no deeper water there then right through. When Enchuyſen lyeth northweſt and northweſt and by weſt from you, then you are upon the Houdtribbe. Before that you come againſt the ſand, you can by night ſee the fire upon Urck. When that Urck or the fire is more northerly then northeaſt from you, and that you get ſhoulding, then that is certainly of the Houtribbe: for ſo you cannot come to near the Enchuyſen ſand. When you come from the ſouthwards, you are not about the Enchevvſen ſand before that the Church upon Urck come without the litle village of houſes, vvhich is then eaſt and by ſouth and eaſtſoutheaſt from you: if that then you goe awaie northweſt and by vveſt or vveſtnorthvveſt, you ſhall runne cloſe alongſt by the ſide of the ſand. With a ſhip of great draught, bring the church a good vvaies through the houſes, untill that it ſtande eaſtſoutheaſt from you, then goe bouldly on northweſt and by vveſt, or keepe Medenblick vvithout the point of the Ven, and ſo you ſhall not come to near, neither to ſand nor shovvlde. Likevviſe if you come from the northvvards, & bring Urck not more eaſterly then eaſtſoutheaſt from you, then you cannot take hurt alſo of the Enchevvſen ſand. From Urck to the buyes upon the Cripple & Hofſtede, the courſe is northvveſt and by vveſt, vvith that courſe you may runne all alongſt unto the ſouther buye upon Wieringhen Flat: in turning to windwards you may vvel bring Medenblick a litle vvithin the point of the Ven, but vvhen Medenblick is vvithout it, then you are in the right farevvaie.

The Houtribbe.

Marks of Enchuyſen ſand.

Betvvixt Urck and the buye upon the Hofſtede northeaſt ſomevvhat eaſterly from the ſteeple of Enchuyſen lyeth a litle plate of hard

ſand, lying towards the end of Enchuyſen ſand, which is not deeper then the Frees Flat, aboute to the eaſtwards of it, is the deepeſt water, but about to the weſtwards of it (by ſome called the Kattegat) you ſhall be ſooner aboute the High horne, or the Enchuyſen ſand, and it is good for ſhips that draw but litle water.

Marks of the buyes upon the Hofſtede and Cripple.

The thwart markes of the buyes, both upon the Cripple and Hofſtede, are Grootebroeck & Hem (two ſharpe ſteeples) right one in the other, and Warnis a litle ſharpe ſteeple in Freeſland to the ſouth ſide of the Cliffe of Staverne, then you haue the length of theſe buyes, which lye each of them in three fathome, the one on the eaſt ſhoare, and the other on the weſt ſhore upon the tayle of the Cripple. There is in the right fare way, two foot leſſe then fiue fathom, and ſoft ground. When the ſteeple of Medenblick commeth to the northwards of the houſe of Medenblick, ſo farre as the houſe is broade, then you are cleare of Crippleſand, and paſt it; goe then on northweſt, and northweſt and by north to the buye upon the Creyl, according

The Creyl.

as the winde and tyde ſhall be, the right farewaie there, is deep fiue fathom ſcarce. Thwart of the Creyl in ſayling out, or about the Creyl in ſayling in, that is a little within the Creyl on the north ſhoare, lyeth alongſt the reach (towards the buye upon the Hofſtede) a hard ſand

South Creyl

or plate called the South Creyl, upon which there is no more then twelue foot water, at low water, betwixt that banck and the north ſhoare it is three fathome deep and ſoft ground, and to the ſouthwards or the weſtwardes of it four fathome and an half. When Mirnes a litle flatte ſteeple in Freeſland cometh over a long countrie houſe to the ſouthwards of the cliffe of Staverne, then you come right thwart of that foreſaide plate.

Markes of the Creyl.

The markes of the buye upon the Creyl, are the ſharp ſteeple of Twiſck over the Cornemill to the weſtwards of Medenblick, and that little flat ſteeple of Mirnes to the ſouth ſide or eaſte ſide of the Cliffe. The right farewaie there is four fathom & an half & fiue fathom deep, ſoft ground; the buye lyeth in four fathome, if need require, men may run wel a cables length about to the eaſtwards of it. From the buye upon the

Freeſplate.

Creyl to the buye upon the Freeſe plate the courſe is north and by eaſt: when the ſteeple of Twiſck commeth a little to the northwards of Medenblick, then keepe them ſo ſtanding, ſo long as you can ſee it, and then you ſhall not faile vvithin any ſhowldes betwixt that plate & the Creyl.

Monick ſand

Betwixt the buye upon the Creyl and the Freeſe plate on the weſt ſhoare, alongſt the Reach, lyeth a hard ſand called Monick ſand, which men may be foul of, if they runne ſome-

what to farre over to the weſtwards.

When you are come about the Creyl, you may goe on north and by eaſt (with a ſhip that draweth but little water) over the tayle of Broad-ſand, right to the buye upon the ſand called Weſtworckum, but with ſhips of greate draughts you muſt keep the right farewaie. For to finde the deepeſt water upon the flat: bring Pandragen a litle flatte ſteeple (ſtanding to the weſtwards of Worckum) to the weſtwards of a litle village, which ſtandeth alſo to the weſtwards of Worckum, and ſaile ſo right with it, that is a good longſt marke of the buye upon the Freeſe plate, and ſo you ſhall runne right with the buye, when as that Warnes and Mirnes come one in the other to the northwards of Staveren, then you haue the length of the buye, which lyeth on the weſt ſide of the Plate, you muſt runne alongſt to the weſtwards of it, there is the deepeſt water: when you come from the northwards, you might ſaile within the Freeſeplate on the eaſt ſhoare.

Being paſt the foreſaid buye upon the plate, goe on northnortheaſt, untill that Pandraghen come betwixt the litle village and Voorwolde. If that you haue then the cliffe through Staveren, then you haue the deepeſt water upon the ſhowldeſt of the flatte, then men runne com-

Buye in the Bight.

monly a little more northerly unto the buye in the Bight, and alongſt to the weſtwards of it, which lyeth right in the farewaie, in ſixteene foot, but alongſt to the eaſtwards of the buye is the deepeſt water, the farther into the Bight towards Freeſland the deeper. The marke of this buye, is the little flatte ſteeple of Mirnes on to the ſouthwards of Molqueren. Bring that foreſaid little flat ſteeple in Molqueren, and keepe it ſo ſtanding, and then you come in the farewaie of the buye of Weſtworckum, that is a verie good marke, when the buyes are taken awaie.

The old thwart markes of the buye in the Bight, are Mirnes, Molqueren, Hemelum and a litle long village, when they ſtand in four parts. Betwixt the buyes upon the Freeſe plate, and in the Bight is the ſhowldeſt of the flat. When the buye in the Bight is on your broad ſide, then go on north and by weſt, ſomewhat more weſterly unto the buye of Weſtworkum, which lyeth on the eaſtſhore in 16 foot at low water, upon theſe

Buy of Weſtworckum.

marks: a little ſharpe ſteeple far within the land called Harich, cometh over a litle village to the northwards of Hinlopen, called Dertwiſch, the right deep thwart of it is three fathom. The old markes are two villages next to Mackum, upon the water ſide, ſtanding n.e. off from it, when theſe ſtand a litle aſunder one frō the other, you ſee yet two litle ſteeples ſomewhat to the northwards of Bolſwaert, almoſt one to the other, neer aboute as the other upon the water ſide ſtand

aſunder

aſunder, the one is called Idſegahuyſen. The thwart markes are a high houſe on the eaſt ende of Coudom, that commeth within a capſtone barres length to the ſouth end of Hinlopen. Frō thence to the buye upon Yghelhoeck, the courſe Yghelhoeck. is north, the markes thereof are, a little ſharpe ſteeple with the firſt long Village to the northwards of Workum called Geeſt, when that litle ſteeple cometh in the innermoſt ſwampe of that long village, then you haue the buye, that is a good thwart mark: the longſt marks are, the ſharp ſteeple of Pingom over the flat ſteeple of Coorenwaert upon the water ſide, and Pandragen to a litle houſe to the northwardes of the village with the ſwamp, or when the mil of Staveren ſtandeth betwixt the town and the Blockhouſe of Stavern, theſe are al good longſt marks of the buye upon Yghelhoeck.

From Yghelhoeck to the Middleground the Middle-ground. courſe is north, the right deepe in the Middleground is ſeuen fathome. In the farewaie betwixt Weſtworckum and Yghelhoeck the right deep is four fathome, ſoft ground, the eaſt ſhore is flat, and the weſt ſhore ſteep. The buye of the Middleground lieth upon theſe marks: the two ſharpe ſteeples Arum and Pingom one in the other about northeaſt from you: or Bolſwert right to the northwards of a Countrie houſe, to the northwardes of Mackum, theſe are good thwart marks of the Middleground. The longſt markes are: Kinſwaert (that is the runner) commeth behind the church of Surich, then you are right in the farewaie. The Church of Surich ſtandeth upon the vvater ſide, upon a pointe that lyeth out aboute northeaſt and by north from the buye, or when the flatte ſteeple of Wynaem (to the northwards of Harlinghen) cometh betvvixt Midlum and the eaſt ende of Harlinghen, then you are right in the Middleground, on which ſide that Wynaem ſtandeth neareſt, that ſhore you are alſo neareſt unto, the vveſt ſhore is ſteep, the eaſt ſhoare indifferent flatte, you may runne over it in three fathome, and come againe in fiue fathome tovvards Frieſland. From the Middleground outvvards to the Flye, you can ſail within no tailes of ſands on the vveſt ſhore.

Swanebalgh. Being paſt the buye in the Middleground, then goe on northnorthweſt unto the buye upon Swanebalgh, vvhich lyeth in three fathome on the eaſt ſhore, the thwart markes thereof are Bolſvvaert over a litle ſhort houſe to the ſouthvvards of Cornvvaert. When you runne over betvvixte the buyes of the Middleground and Svvanebalgh on the eaſt ſhoare more eaſterly then in three fathome, that you come againe in four or fiue fathom, you might (in ſayling out) ſail behind the ſhoulds of Swanebalgh, or when you are bound in, behinde the ſhovvlds of the Middleground, the weſt ſhoare thvvart of this, you may ſound in four fathom, or three fathom and a half; over againſt the buye upon Svvanebalgh, on the weſt ſhore is good ground for to ancker in.

From the buye upon Svvanebalgh to the buy upon Schuyteſand the courſe is n.vv. ſomewhat Schuyteſand. northerly: the thvvart markes thereof are, Wynaem over the higheſt part of Harlinghen: the longſt marks are, Bolſvvaert to the northvvards of the Sluys vvhich lyeth to the northvvardes of Woens: this buye lieth in ſix fathom on the eaſt ſhore, upon a taile or pointe, vvhich you might ſaile vvithin vvhen you ſaile out, the right deepe thvvart of it is ſeuen and eight fathom, the vveſt ſhore is indifferent flat, vvhich you may ſounde in four fathom, the eaſt ſhore is ſteepe, but a litle vvithout the buye it is flatt all alongſt to Keeſhoeck, and you may ſound it al alongſt unto the Sloot. In ſayling up, you might ſaile within the weſt ſhoare over againſt Schuyteſand, or a little to the ſouthwards of it in three fathom or three fathom and a halfe into a Deadbalgh, behinde a tayle of ſand, called the point of the Waert, but Point of the Waerdt. keeping in 4 fathome frō that ſhore, you cannot take hurt of it. In ſailing up with a forfloud, keep the eaſt ſhore, or els you ſhould be lightly carried therwith into the forſaid balgh, behind that Waert, before you ſhould be aware of it. Vpon the point of that Waert ſtandeth a driftbeacon, & two to the northwards or the weſtwardes of it, which mē do cal the beacons of Claeſoomen, & to the ſouthwards of it ſtandeth a beacon upon Dominicusplate, or (as the Pilots do name it) Meynſen plate. The marks for to ſail alongſt this long reach are: Mackum with a mill upon the water ſide, & a village with a litle flat ſteeple to the ſouthwards of Mackum called Idſegahuyſen, when Pandragen cometh betwixt Mackum and that village, then you ſhall go cleare of that foreſaid taile or Deadbalgh: If Pandragen come neareſt to Idſegahuyſen, then you are too near the foreſaid taile or plate, or if Pandraghen come neareſt to Mackum, then you are too near the eaſt ſhore.

From Schuyteſand to the buye upon Keeſ- Keeshoeck. hoeck, the courſe is weſtnorthweſt, or northweſt and by weſt, according as the winde and tyde ſhall be. In that long reach goe litle more then half tydes alongſt the deep, the afterfloud and fore ebbe fall thwart over there to the weſtwardes, and the after ebbe and fore floude right contrarie to the eaſtwards. The markes of the buye upon Keeſhoeck, are Franicker ſteeple betwixt the mill and the towne of Harlinghen, or to the maſtes of the ſhippes which lye in the hauen.

This buye lyeth on the eaſt ſhore, the right farewaie thwart of it is eight, nine, and ten fathome deep.

Betvvixt Keeſhoeck and Schuyteſand, or betwixt the beakons of Claeſoomen & the pointe of the Water lyeth a litle narrowe plate alongſt the reach, almoſt in the middeſt of the farevvaie neareſt to the vveſt ſhoare, vvhereupon it is not deeper then four fathome, or three fathom and an halfe, vvhen men turne to vvindevvards they are over it vvith tvvo or three caſts of the lead.

Old Flye. Weſtwards from the buye upon Keeſhoke lyeth the Old Flie, it lieth in firſt ſouthſouthweſt, and then forth to the buy upon the Neſſe, in the Teſſel ſtream. The after floud with the foreebb fal in verie ſtrong into this chanel. In ſailing upvvards you might ſail vvithin it in four fathom. The marks of it are, the ſteeple of Franiker right to the ſouthvvards of the ſteeple of Harlinghen. From thence outvvards off unto Schieringſhals the vveſt ſhore is verie ſteep, in eight fathome you ſhal be cloſe by the ſhore. The farevvay betvvixt theſe buyes, and thvvart of the buye upon the Ellbovve is tenne and eleuen fathom deep.

Wolfshook. From Keeſhoeck to Wolffhoeck the courſe is firſt northweſt and northweſt and by north unto the buye betwixt them both, by ſome called the Schor tun, and by the Pilots the buye upon the Ellbowe: and then from thence to the buye upon Wolffhoeck, north, or ſomewhat more eaſterly, which lyeth in four fathome on the eaſt ſhore.

Schortun or the buye upon the Elle.

Schieringshals. From the buye upon Wolffhoeck unto the buye upon Schieringſhals the courſe is northnorthweſt, and northweſt and by north according as the winde and tyde ſhal be. To the the northwards or to the eaſtwards of the buye upon Wolffhoecke goeth up a broade bight ſoutheaſt farre into the groundes, ſo deepe as the righ farewaie, called the Inſchot, comming in you might ſaile within it in ſeuen fathome, the foreſloud falleth from Schieringſhals verie ſtrong into it, and the foreebbe to the contrarie, very ſtrong out of it upon the tayle of Schieringſhals, whereby manie ſhips are miſcarried.

The Inschot.

Schieringſhals is a tayl of ſand, which ſhooteth off from the weſt ſhore, upon it lyeth a white buye in three or four fathome, comming in from without, men might ſaile within it in ſixe fathome, the right deepe betwixt Wolfshoeck and Schieringſhals is nine fathome.

Longſand. From Schieringſhals to Longſand, the courſe is northweſt, and northweſt and by north, betwixt them both on the weſt ſhoare it is thallow water, and the beſt roade of al the Flye ſtreame, there goeth alſo litle tyde. The right deepe is eight, nine & ten fathom, Longſand men might ſail within it on the eaſtſhore, in ſailing up, but if they keep themſelues in ſeuen or eight fathom, they ſhall not come to neare neither of Longeſand nor Schieringſhals. When the eaſtermoſt houſe upon Grindt cometh a litle to the northwards of the weſtermoſt, then you haue euen the length of the buye upon Longſand. From Longſand to the Sloot the courſe is forth north-northweſt, the right deep is tenne fathome, or men runne alongſt by the beakons upon Crakeſand, untill they come into the Sloot.

Monck ſloot

Of the tydes.

AT Amſterdam a northeaſt and ſouthweſt moone maketh the higheſt water.

At Horne, Enchuyſen, and at Vrck a north & ſouth moone.

Betwixt Cripple ſand and the Creyl a north and by weſt and ſouth and by eaſt moone.

Upon the Frieze and Wieringer flat a northweſt and ſoutheaſt Moone.

CHAPT. II.

Of the Ilands Flieland & the Schelling, & of the chanels of the Flye and Ameland.

THE Iland Flieland is three leagues long, and a land verie good to be known: upon the eaſt ende lye high white ſand hilles, and to the weſtwards it is a land ful of ſhort low hommocks or nobbes. Upon the weſt ende ſtandeth a Church with a mill to the eaſtwards of it. From the weſt ende ſhooteh off a riffe a good waies into ſea. To the weſtwards of this riffe, betwixt Flieland and the Eyerland goeth in a deep, called the Weſter gatte, or VVeſtflieland deepe, which is not for great ſhips, but onely for Fiſher boates, there is not aboue eight or ten foote water. Vpon the eaſt ende ſtandeth a mill with a cape, the which are markes for to avoid the grounds, which lye before the Flye.

The eaſt end of Flieland, and the weſt end of Teſſel lye eight leagues a ſunder.

To the eaſtwardes of the Flyeland lyeth the Schelling, which is aboute three leagues long. Vpon it ſtand four churches, with one chappell, the weſtermoſt is a high flat ſteeple called Brandaris. Aboute the middeſt of the Iland ſtande

two

Het VLIE en Amelander gat

Eng. en Fr. mijl. 20 in een Gr

Duijtsche mijlen 15 in een Graadt

Spaansche mijlen 17½ in een Graadt

Hoorn

DER SCHEL

Cromme Dalgh

De Horsen

Lange hoek

Campersandt droogh

Cogge diep

Cogge diepes grondt

Hoelem

Amelandt

Amelander gat

Boorn rif

Schreyngs hals
Hendrick Iaerts plaet
Crak sandt
Langer sandt
de Sloot
Grind
de pluer
De Lanbgh
Speck hoeck
Vlissingen
Vlissingen plaet
VLIELANDT.
Vmyrboed
Stortemelck
Groote plaet
Noorlandt Van Bootgat
Boots gat
Cleine plaet
Schuyt gat
Droogeplaet
Lange banck
Kattegats gronden
S. Brandaris
Wester droogh sandt
Vlissingen
Vmyrboed
Ranhoeck
Bos
Wester droogh sandt
Wester hoeckes gat
Schorre gronden
Baums gat
Met Prwilegie der Ed. H. M. Heeren Staten generael voor thien jaren.
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two ſteeples, the weſtermoſt is flat, called Zeerip: the eaſtermoſt is sharp, and is called Midlands. To the eaſtward ſtands yet a high sharp ſteeple called the Horne, and a Chappell called S. Iohns. Vpon the eaſt end lye high white ſandhills, and vpon the weſt end lyeth but one, called the Lit; betwixt Midlands and the Lit it is low Nubby land. Vpon the weſt end ſtandeth a cape with a Fire-beakon, whereon there is fired by night.

Stortemelck.

FOr to ſaile into Stortemelck (that is the Land-deepe of Flie-land) you muſt bring the Cape upon the eaſt end of Fly-land, and the mill one in the other, which ſhall ſtand then from you ſoutheaſt & by eaſt, or a litle more eaſterly, ſaile right in with them, and you ſhall fall right with the outermoſt buye, which lyeth in fiue fathom upon the outermoſt point of the long bank, which bank is on the north ſide indifferent flat, ſo that when you come from the north, you may run alongſt by it upon your lead in 5 or 6 fathom, and ſo alſo find the foreſaid outermoſt buye. You may alſo (for need) run alongſt ſomewhat to the eaſtwards of the outermoſt buye, over the end of the long banck in three fathom, or 16 foot towards the ſhore, but not to the eaſtwardes of the ſecond buye, but a good wayes alongſt to the weſtwardes of it, which lieth even to the ſouthwards of a point of another narrrow taile of ſand, upon which thwart of the buye is but eleven foote water, betwixt that taile and the long bank runneth a creek to the eaſtwards into the grounds, of fiue fathom depth. It happeneth ſometimes that the ſhips that come over the end of the the long banck, and finding again deeper water, think that they are in the right deepe of Stortemelck, and luffe up into it, but they run into the foreſaid ſhare or creeke, in betwixt the two tails of ſands, not without great danger with a weſterly winde, where they muſt go out back againe. Comming from the weſtwards alongſt by Flieland in foure or fiue fathom, you ſhall not alſo faile to run in ſight of the foreſaid outermoſt buye. He that falleth about Stortemelck by night, let him bring the fire-beakon ſoutheaſt and by eaſt from him, and run in ſo right with it untill hee come by the ſhore, and he ſhall run alongſt to the weſtwards of the outermoſt buye. In Stortemelck lye ſeven black buyes, and one white buye, in ſayling in you muſt leaue all the black buyes on the larboard ſide, and run alongſt to the ſouthwards of them: and the white buyes on the ſtarbord ſide, like as all other white buyes as well in the Booms-gat, the letting, as upon the Flye ſtreame. The ſecond buye called the outermoſt Droghe dry, lyeth in 11 foot upon the ſhowldeſt of the chanel, to the ſouthwards of it alſo is no more then eleven foot water, but a litle within, it is again ſixteen foot deep. The third is called the innermoſt Droghe dry, which lyeth in ſixteen foot, the right deep betwixt them both is three fathom. The fourth is called Heyckhook, betwixt this & the third it is in the fareway fiue fathom deep, over againſt the fourth lyeth the white buye atthe ſtrand, thwart of it runneth off a litle tail from the ſhoare, which (in ſayling out) you might ſaile within it. Vnto this white buye, or unto the fourth buye from without, it lyeth in eaſtnortheaſt, from the fourth to the fifth about eaſt, and then more and more ſoutherly. The fift buye is called the outermoſt point buye, the ſixt the middlemoſt point buye, and the ſeventh or laſt the innermoſt point buye. Betwixt the outermoſt & the middlemoſt point buye, neereſt to the outermoſt, runneth off a taile of ſand from the ſhore, which men might ſaile within when they come in, which groweth out ſometimes as farre as the buye, and then the Deepe breaketh through againe by the ſhoare, and ſcoureth awaye the taile altogether to the north ſide. From the innermoſt buye you muſt run in all alongſt by the ſtrand of Flye-land, or on ſouthwards to the buye upon the Plate.

Booms-gat.

FOr to ſail in at the Boomkens-gat, comming out of the ſea, or from the weſtwards: bring the Cape upon the Schelling and the ſteeple of Brandaris one in the other, which ſhall then ſtand from you ſouthſoutheaſt, and ſoutheaſt and by ſouth, run then right in with them, and you ſhall find the outermoſt buye without the chanel in the ſea in eleven fathō, a litle without, and to the eaſtwards of the outermoſt point of the ſteepe grounds, which are without upon the north ſide ſo ſteepe, that you ſhall be in twelue fathom very cloſe to them, whereupon remaineth no more then fiue foot water. Cloſe to the eaſtwards of the foreſaid Cape ſtandeth a Fire-beacō, wherupon is fired every night, as upon Brandaris. If by night you bring the fires on in the other, or the fire of the Fire-beacon even to the eaſtwards of the fire upon Brandaris, and ſaile in ſo right with them, until you come againſt the ſouth ſhore, you ſhall runne cloſe alongſt by the outermoſt buye: when

as then the fire upon Flyeland commeth to be ſouthſouthweſt, or a little more weſterly from you, you ſhall be thwart of the outermoſt buye, or the outermoſt of the ſteepe grounds. The foreflood falleth eaſtnorth-eaſt thwart over this chanell, almoſt untill halfe flood before it ſetteth right in, and contrariwiſe the fore-ebbe falleth alſo weſtſouth-weſt thwart over the channell, almoſt untill halfe ebbe before it ſet right out: therefore it is beſt with a northeaſt or eaſterly winde, and a fore-ebb to ſeek to the shore ſomewhat to the eaſtwards of Cape and ſteeple, and run alongſt by it in fiue fathom, which is clean & flat all alongſt untill within Cape and ſteeple. The ſecond buye lyeth in foure fathom, within the outermoſt point of the ſteep grounds, lying from the firſt about ſouth and by weſt. Betwixt theſe two firſt buyes it is twenty foot deep upon the ſhowldeſt of the chanell thwart of the foreſaid poynt of the ſteepe grounds, which are at the end ſo ſteepe, that it is cloſe to them 18 foot deep, the eaſt ſide is flat riſing ground, & ſhowldeth by litle & litle from eighteen to ſixteen, foureteen, and twelue foot. To the eaſtwards of the ſecond buye, the fareway is three fathom deepe, to the weſtwardes of it, is fiue fathom, but not farre, therefore you may not run far alongſt to the weſtwards of it, with a fore-ebbe you ſhould bee very ſoone on againſt the ſteepe grounds, which are on the inner ſide alſo very ſteepe. The eaſt ſhore you may run as neere to it as you will upon your lead, but with a ſtorm the ſea breaketh very much upon it, and is in a breach al alongſt until the ſecond buye. The ſecond, third, fourth, and fifth buyes lye all upon one courſe one from the other, to wit ſouth and north, the third in fiue fathom on the eaſt ſhore, but yet men may well goe about to the eaſtwards of it, the eaſt ſhore is thereabouts flat, and the fareway to the weſtwards of the buye is ſeven fathom deep. The fourth called the buye upon Feyhoeck, lyeth alſo on the eaſt ſhore (but neerer then the third) in fiue fathom, which men may alſo ſaile alongſt to the eaſtwards of it, the fareway to the weſtwards of it, is nine fathom deepe. Vntill you be paſt that buye, you may ſayle in from without upon your lead alongſt by the eaſt ſhore, & alſo by night or dark wether, but from thence inwardes, it is alſo ſteepe. The fifth buye, called the outermoſt buye upon the Boſſe, lyeth in foure fathom alſo on the eaſt ſhore, which is there very ſteepe, the fareway to the weſtwardes of it, is eleven fathom deeepe. From the outermoſt Boſſe buye to the innermoſt buye upon the Boſſe (which is the ſixth) the courſe is ſouth & by eaſt, which lyeth in 4 fathom cloſe to the ſhore, which is alſo thereabouts very ſteepe, the fareway to the weſtwards of it is 10 fathom deep. From the foreſayd innermoſt buye upon the Boſſe, unto the Robbegat, the courſe is ſouthſouthweſt, the ſame courſe lyeth right through Robbegat unto the point of Flyeland, wherein lye three white buyes on the weſt ſhore, and three black buyes on the eaſt ſhore, betwixt which men doe run through. The outermoſt white buye lyeth from the innermoſt buye upon the Boſſe right ſouthweſt, he that cometh in with a foreflood, muſt ſaile at leaſt ſouthweſt, or ſometimes yet more weſterly, that he may not fall to leewards of the black buye, the foreflood falleth very ſtrong into the letting, and the afterflood turneth about again to the weſtwards with the fore-ebb out at Stortemelck, but yow may eaſily ſee from one buye to the other. In the entring of Robbegat betwixt the two firſt buyes, it is ſixteen foot deepe, betwixt the two laſt buyes thirteen foot, and in the middeſt fiue, ſixe, ſeven, and foure fathom. Being through the Robbegat run to the ſtrand of Flyeland, and very cloſe alongſt by it, or to the buye upon the Plate, which lyeth in foure fathom on the eaſt ſhore, which is indifferent flat, but within the buye, it ſhooteth ſomewhat out with a point, and waxeth ſteep.

The letting.

For to ſaile into the letting, the courſe is from the foreſaid innermoſt buye upon the Boſſe, unto the buye upon Hobbeſand alſo ſouth and by eaſt. The fareway alongſt to the weſtwards of the buyes is tenne and nine fathom deepe. From the point of the Boſſe unto Hobbeſand lieth alongſt a ſmal ribbe, upon which remaineth two fathom, and at the deepeſt ſixteen foot water, to the eaſtwards of it there is againe ſixe, ſeven, eight and nine fathom deepe, men may runne alongſt there in times of Ice-drift, or the like, unto the Bootsgat, where is upon the ſhowldeſt eleven foot water, and over the ſhowldeſt there is againe three fathom, and before the Schelling fiue, ſixe, and eight fathom deepe, there men doe lye as in a haven, in regard the ſands thereabouts doe fall drye at low water. In the Iettingh lie ſixe black and foure white buyes, the black buyes you muſt leaue on the larboard ſide in ſailing up, and the white on the ſtarbord ſide. From the buye upon Hobbeſand, unto the firſt black buye in the letting, the courſe is ſouth, and ſouth and by eaſt. The fareway betwixt them is nine and eight fathom deep. About halfe wayes betwixt theſe two buyes, lyeth alſo a white buye on the weſt

weſt ſide upon Speckhoek, to the ſouthwards of it goeth a creeke weſtſouthweſt, or ſouthweſt and by weſt through the grounds, and commeth out to the northwards of the buye upon the plate againſt the poynt of Flyeland into the Flye ſtreame, there remaineth upon the ſhowldeſt eleven foot water; with a foreflood you muſt ſaile at leaſt weſtſouthweſt, or rather more weſterly. The ſecond buye in the letting lyeth from the firſt ſouth, the fareway betwixt them both is ſixe fathom deepe. Over againſt the ſecond buye lyeth a white buye on the weſt ſide, upon the point of a taile of ſand, which men might ſaile within, in ſayling up. Betwixt theſe two buyes it is not deeper then two fathom. From the ſecond buye to the third and fourth, the courſe is ſouth, and ſouth and by eaſt, and the fareway three fathom deepe. Overagainſt the fourth buye, (called the buye upon the Nakens) lyeth the ſecond white buye upon a point which men might ſail within in ſailingout; within that, the land falleth away with a great bight towards the ſouthweſt, there is good ancker-ground and roade in fiue fathom. From the fourth buye ſaile alongſt by the beakons upon the Nakens eaſtſoutheaſt on, untill that Brandaris come cloſe by Grindt, but not to it, keepe that ſo ſtanding, and run on ſouth, and you ſhall ſaile right upon the buye which lyeth upon the taile of Hendrick tIaerts plate, which you might ſaile within on the eaſt-ſide. Leaue that on the Larboard ſide, and run alongſt to the weſtwards of it, ſouthſoutheaſt unto the laſt buye, which lyeth upon the ſouth point of the foreſaid Hendrick tIaerts plate. Over againſt the beakons upon the Nakens lye on the ſouth ſide two white buyes, the eaſtermoſt upon a taile of ſand, which men might ſaile within, in ſailing off. To the ſouthwardes of it, betwixt the two laſt black buyes, by the weſt ſide, is the roade where the ſhips doe anker for to light, which are bound to Harlinghen.

Note.

All the depths here before rehearſed, as well of Stortemelck as of the Boomkens-gat, are ſaid of the loweſt water, at halfe flood it is three foote deeper; it floweth upon theſe aforeſaid places with a common tyde fiue and an half or ſix foot up and downe. The numbers of the depths ſet downe in the carde of the Flye and Ameland gat, are to be underſtood of feet: as for example, by the outer buye of the Bomekens gat ſtand 66, that are 66 foote, or eleuen fathome, ſixe foote being reckoned for a fathome.

Ameland gat.

TWo leagues to the eaſtwardes of the Schelling lyeth Ameland, lying e. n. e. and w. ſ. w. four great leagues. Upon the weſt ende of Ameland ſtandeth a Cape, & a great thick flat ſteeple, called the Hoelme, the roofe of this church is broken off, but the after fronte with the roofe ſtandeth aboue the ſide walls, to the eaſtwards of the church of Hoelm ſtandeth a mill, with a houſe to the weſtwardes of the mil, alſo a broade flat towre. Aboute the place where Midland church was wonte to ſtand, lye three or four white ſandhilles, which are lowe flat and long, towards the eaſt ende it is nobbie land, with white amongſt it. From the weſt ende of Ameland runneth off a riff, almoſt three leagues into ſea, called Bornrif, which is upon the outer ſide verie ſteep: come no nearer it, then in 12 fathome, comming from the eaſtwards you cannot ſaile within it, but in ſayling alongſt by it in ſeuen fathome, you ſhal not run a bowles caſt alongſt without it. Bornriffe.

For to ſaile into Ameland gat, comming out of the ſea, bring the cape upon the eaſt ende of the Schelling, right over the ſteeple of Horne, which ſhall then ſtande from you ſ. ſ. w. or a litle more weſterly, ſaile in right with them, until that the cape upon Ameland, and the ſteeple of Hoelm are one over the other, then leaue the firſt markes, and ſaile in upon the ſecond, & you ſhal find the outermoſt buye, which lieth ſomewhat within the outermoſt point of Bornriffe. Comming from the weſtwards, run alongſt by the ſtrand of the Schelling in fiue, or fiue fathome and an half at lowe water, and you ſhall not fail to ſaile right upon the outermoſt buye, and then the Cape and ſteeple upon Ameland ſhall alſo come one over the other, & ſtand from you eaſt, or a litle more ſoutherly. Comming alongſt by the Schelling in four fathome, you ſhall not ſaile within the Koggedeepes grounds; over againſt them lyeth the firſt buyt on the ſouth ſide of Bornerif, run alongſt to the ſouthwards of it, keeping the cape & ſteeple one over the other, untill you be paſt the ſecond buye, which lyeth thwart of the weſt ende of Kamper ſand, the farewaie betwixt theſe two buyes is 5 and 6 fathome deep. Kogg deeps grounds. Kamper ſand.

Being paſt the ſecond buye, bring the ſteeple ſomewhat to the northwards of the Cape, & goe on eaſtnortheaſt towardes the third buye upon Gerritſhonden, for to avoide the plate which lyeth off from the ſouth ſide, towardes Bornriff, on it lye two white buyes, the firſt over againſt the aforeſaid third black buye, the other over againſt the fourth black buye, lying from the third aboute ſoutheaſt; leaue the black buyes all on the larboard ſide, and the white on the Gerritshonden.

the ſtarbord ſide, and run through ſo betwixt them both, the plate is on the north ſide indifferent flat, ſo that you may run to it upon the lead; reckon wel your tydes, eſpecially be carefull of a fore-ebbe, which falleth very ſtrong over that chanell northnorthweſt into ſea over Bornriffe. Betwixt the ſecond and third buye in the fareway it is eight and nine fathom. Betwixt the third and the foreſaid plate ſeven fathom. Being paſt the fourth buye, both ſides are very ſteepe, and the fareway 8, 9, 10 and 12 fathom deepe, goe then in ſouthſoutheaſt until that the ſteeple of Holm come over the ſouth point of Ameland where the boats lye, and then you come in the bight where it is on the ſouth ſide flat, and good ankring in fiue or ſix fathom, the north ſhore is very ſteepe.

For to ſaile further in to the Horſen, goe away from the bight eaſtnortheaſt alongſt by the ſouth ſide in fiue or ſixe fathom, ſo long untill Heynooms chamber (being a red tyled houſe) come a handſpikes length to the northwardes, or to the eaſtwardes of Hoelmchurch, ancker there in fiue or ſixe fathom, you ſhall lye there in good ground, and ſheltred for all windes, alſo there goeth litle tyde, in this fareway it is twelue fathom deepe; the north ſhore is there very ſteepe. Theſe foreſayd depths (like as alſo thoſe of the Flye) are ſayd of low water.

Of the tydes and courſe of the ſtreames.

IN the Flye and Ameland gat a ſoutheaſt and northweſt Moone maketh high water. Before the Flye the flood falleth to the eaſtwardes thwart over the grounds, almoſt untill halfe flood, before it ſetteth into the Boomkens gat. Likewiſe the ebbe to the contrary falleth to the weſtwards thwart over the grounds, almoſt untill halfe ebbe, before it ſetteth right out at the channell. The after flood turneth about with the fore-ebbe, and fall alongſt Flyeland out at Stortemelck, but the foreflood runneth right into Stortemelck.

Of the depths about theſe places.

THe Ilands Flyeland, the Schellingh and Teſſell men may ſee in 15 & 16 fathom. Thwart of the Schelling the ground is white ſand.

The ſteep grounds or Peter-ſand, & Bornriffe, are very ſteepe on the off ſide, cloſe by them it is 12 or 13 fathom deepe.

Ameland men may ſee in 12 fathom, the depth of 13 and 14 fathom runneth farr off to ſeawards, ſo that men cannot ſee it in fifteen fathom.

Courſes and diſtances.

PEterſand, or the ſteepe grounds, and Bornriffe lye northeaſt and by eaſt, and ſouthweſt and by weſt foure leagues aſunder.

From the Flye to the northeaſt end of the Broad-fourteens, the courſe is weſtnorthweſt 8 leagues

From the Flye to Tinmouth, or Newcaſtle, weſtnorthweſt 90 leagues

From the Flye to Hitland the courſe is n.w. & by north ſomwhat northerly 152 leagues

From the Flye to Fairehill northweſt and by north about 144 leagues

From the Flye to Scuytenes the courſe is north and by weſt ſomwhat northerly 106 leagues

From the Flye to the Naes north and by eaſt about 85 leagues

From the Flye unto the Riffe in ſixteene fathom north and by eaſt 63 or 64 leagues

From the Flye to Boevenberghen the courſe is northnortheaſt, or a litle more eaſterly about 69 leagues

From the Fly to Rinkopper, or Numer-deep northnortheaſt, or a little more eaſterly about 58 leagues

From the Fly to the Iland Silt on the coaſt of Iutland the courſe is northeaſt 46 leagues

From Bornriff to the Naes the courſe is north or a little more eaſterly 82 leagues

From Bornriff to Holy land northeaſt and by eaſt 33 leagues

From Bornriff to Wrangheroogh eaſtnortheaſt 29 leagues

From Bornrif to the Weſter-Eems 14 leagues

Howv the foreſaid lands doe shewv themſelues at ſea

Thus ſheweth Flyland when you are about two leagues thwart off from it.

Thus ſheweth the Schelling when you ſail alongſt by it about two leagues from the land.

Ameland ſheweth it ſelfe thus when you are about two leagues thwart off from it.

CHAP.

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Ameland ſheweth it ſelfe thus when you are about two leagues thwart off from it.

CHAP.

De Wester ende ooster Eemsen met de ander gaten der Zee tusschen Amelandt en Langeroogh

Namen sommiger plaetsen op beyde de Eemsen met letters aengeteeckent

a. Geltsacx plaet
b. De nieuwe steert
c. De Wolden
d. Borkummer balgh
e. De Ransel
f. Steven Iansens ton
g. Iannes sandt ofte Reidersat
h. Brouwers plaet
i. Memer sandt
k. 't baken op de hoge horn
l. Memer balgh
m. De ton op Connix plaet
n. Ton op Hamborgersandt

De Eemse

De Dollaert.

Oost vries landt.

Nesselandt

Reyde

Emden

Langerhorck

Geersyper

De knock

De Hom

Pilzum

Grietzyl

Pilzummer wadt

Hamburger Sandt

Bonse

westerbroeck

Norden

Bandt ofte keten

Bumsen

Langeroogh

Baltrum

Norderny

Iumet

De Akorny

Wichtery

Norderny

Buysdiep

Oude Clooster

Groe

Den Dam

Delfzijl

ninger-

Wadem

Lens

Landt.

Oostermelandt

Hoorhuijsen

Vriesland.

Oostmerhorn

Bolwert

Dockekom

Runtinaken

Wildbaken

Humberts plaet

Rottum

Bosch

Schiermonnickoogh

Ameländ

't Noordoostergat

't Noordwestergat

Duijtsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graa.

Eng. en Fr. mijlen 20 in een graa.

Namen zommiger plaetsen op de Scholbalgh, Lauwers en de Schille.

a. T'hooge sandt
b. De Peerdemarct
c. De Knockebalgh
d. Symons sandt
e. Boßandt
f. Zādē van Rottum die na den bosch strieckē

6

CHAPT. III.

Of the Scholbalgh Lavvers, Schille, and of both the Eemſes.

Schiermonc-ogh.

SChiermonckogh lyeth from the eaſt end of Ameland eaſt ſomewhat northerly three leagues, it is a litle low plain Iland, about 2 leagues long, there ſtandeth no ſpecial thing upon it to be known, but upon the weſt ende two capes, with a white ſandhill, otherwiſe it is all with lowe blackiſh ſandhils or hommocks, (but higher then upon the eaſt end) & mingled with white: the eaſt ende is a long flat ſtrand, with little low rough ſandhils. When you bring the two capes upon the weſtend one in the other, & runne ſo in, you ſhall finde the outermoſt buye, which lieth without the channell, at ſea in 7 fathom, or thereabouts. Sometimes there lie two, & ſometimes three buyes in the chanell, which you muſt leaue on the ſtarboard ſide, & runne alongſt to the eaſtwards of thē, being come within the chanel you ſhall finde beacons alſo on the weſt ſhore, which you muſt followe all alongſt, until you come to Oſtmerhorn, where you may ancker. The lying in, and depths of that channell do alter & ſhift often times, & ſometimes much within a ſhort time, ſo that there is no certaintie to be written of it, whereunto men might truſt.

Rottum.

Four leagues to the eaſtwards of Schiermonckogh lyeth the Iland Rottum, and betwixt them the litle Iland the Boſch. A fewe yeeres paſt, through ſetting of ſpyrie graſſe or heath, there was grown two or three handſome ſandhils, but are now again altogether blown awaie, and altered into a plaine flat ſtrande, which the ſea at high flouds doth altogether runne over.

Betwixt theſe Ilands the Boſch and Schiermonckogh was wonte a channel to goe in of indifferent depth called the Lawers, which is now moſt caſt to, by the foreſaid ſtrand of the Boſch, which is grown in al alongſt unto the Oogh, ſo that there is no more remaining then a narrowe & ſhowld creeke.

To the eaſtwardes of the Boſch goeth in the Schille, alſo an altering and uncertain channel, which is ſometimes deep, and ſometimes again ſhowld, and the channel ſhifteth too and again, ſo that there is no certaintie to be written of it, whereunto men might truſt.

The Weſter and Eaſter Eemſes.

Rottum.

THe Iland Rottum is a litle Iland, about a league and half long & verie good to be known, the weſt ende is high and ſteep, the reſt is low land with ſome litle ſandhils. Vpon the eaſt end ſtand two capes, the greateſt, or the runner ſtandeth upon the eaſt end upon the flat ſtrand, the ſmalleſt on the ſouth ſide of the ſandhill. There ſtand alſo two houſes upon it, the one upon the weſt end, the other in the middeſt of the Iland in a valley.

Borckum.

Borckum is alſo an Iland good to be known, two great leagues long, it ariſeth commonly, (whē you come in out of the ſea) in three parts, as if it were three Ilands, when you come from the weſtwards, it ſheweth it ſelf in four parts, for with high flouds the water runneth through in three places. The Wor. Counſell of Embden hath cauſed to be ſet upon the weſt ende a high thick ſteeple, which men may ſee far off at ſea, on the weſt ſide of that ſteeple ſtandeth a little low church.

From the weſt ende of Borckum ſhooteth off a riffe a greate waies into ſea, called Burckum riffe: to the ſouthwards of it, to wete, betwixt Burckum & Rottum goeth in the Weſter Eems, which is the verie beſt channel, that lyeth in all this coaſt.

For to ſaile into the Weſter Eems, you muſt bring the capes upon Rottum one in the other, which ſhall then ſtande from you aboute eaſt-ſoutheaſt, ſail in out of the ſea right with them, and ſo you ſhall finde the outermoſt buye in ſix fathome at low water.

Or els, if you come from the weſtwards running alongſt the ſhore in ſeuen fathom, then you ſhal run alſo in ſight of the foreſaid buye. Being come to the firſt buye, then the ſteeple of Burckum ſhall ſtand eaſt from you, and the weſt ende of Rottum about ſoutheaſt & by ſouth. Towards the land, from the ſecond buye lieth a plate, called Geltſacks-plate, which lyeth all alongſt the reach, unto the fourth buye, whereupon is no more then 14 or 15 foot depth at low water.

Geltſacks plate.

From the firſt buye to the ſecond, third, and fourth the courſe is al alongſt eaſt. The ſecond buye lyeth in fiue fathome, the third in four fathome and a half, that is, upon the ſhowldeſt of the Weſter Eems: the fourth buye lieth alſo in four fathome and a half, upon the pointe of the foreſaid plate. All theſe buyes you muſt leaue lying on the ſtarboard ſide, when you ſail in.

Comming from the weſtwards thwart of the Lawers or Boſſand, then keepe the ſounding of the ſhore in fiue fathom, until you be paſt it, ſail then boldly on eaſt, & thē you ſhal run through within Geltſacks plate, in three fathome and an half, & ſo come by the fifth buye into the deepe of the Weſter Eems, then keep ſtil the ſounding of the ſouth ſhore. The Herring bancks, which were wont to lie off to ſeawards, at the weſt end of Rottum, are quite and cleane gone awaie, ſo that it is wide & broad betwixt Rottum & the foreſaid plate.

The Riffe of Borckum is on the off ſide & upon the end flat, when the Capes upon Rottum ſtand ſoutheaſt from you, then you may ſaile alongſt over the Riffe, right unto the fourth buy, and ſo you ſhal finde upon the taile of the Riffe at low water not leſſe then ſixteene foot water, for it is flat and broade. On the Inner ſide it is verie ſteepe and needle too, there ſhooteth off alſo from the Inner ſide a tayle of ſand, which men might ſaile within at unawares, in ſayling up, you may not come nearer to it, then ſeuen fathome, all alongſt untill you come to Borckum.

The fifth buye lieth in the middeſt of the farewaie in eight fathome, vvith an ebbe and a ſoutherly winde you muſt go on at leaſt ſoutheaſt, or els you ſhould lightly come aground on Borkum Riffe, or within the aforeſaid taile, which ſhooteth off from Borckum riffe.

From the fifth buye, to the ſixth, ſeuenth and eigth, the courſe is al alongſt eaſt and by ſouth. The ſixth buye, as alſo the ſeuenth lye in the middeſt of the farewaie in eight fathome, the eigth in fiue fathome upon the point of Huyberts plate, which of ſome is called the Haecks, that is a taile which ſhooteth off from the ſouth ſhore. You may borrow by the lead of Rottum or the ſouth ſhore, and not doe amiſſe, but you might ſaile upon this taile of Huyberts plate in fiue fathome at lowe water, but keeping in ſixe fathome you ſhall runne cleare without it. Being at the buye upon Huyberts plate, then Borckum ſteeple ſtandeth about northnortheaſt frō you, and thwart of it in the farewaie it is 12 fathome deep.

Huybertsplate.

From the buye upon Huyberts plate, unto Stephen Iohnſons buye the courſe is ſoutheaſt, which lieth betwixt the Balghbeackon and the Ruytbeacon, in ſeuen fathome and a half. The Eemſe betwixt theſe two buyes is ten & twelue fathome deepe. Comming paſt the buye upon Huyberts plate, you muſt edge ſomewhat off from Borckum, for to avoide the Mieuwes taile, which ſhooteth off from the Wolden or the ſouth ende of Worckum, which you might ſail foule upon, in 5 fathom, when you are bounde inwards.

Stephen Iohnſons buye.

Mieuwes taile.

Weſtwards frō Stephen Iohnſons buye ſtandeth that Wadtbeacon, right to the ſouthwards of it goeth in the Wadt. On the other ſide over againſt the foreſaid buye lyeth the Ranſel, that is a taile which ſhooteth off from the north ſhore, which men might ſaile within, in fiue fathome, when they ſaile upwards. The markes of this Reach, and for to avoide the Ranſell are theſe: Vpon the ſouth end of Borckum lye two little ſandhils, called the Wolden, keep the ſteeple of Worckum to the weſt ſide of theſe ſandhils, or to the weſtwards of them, and then you ſhal go cleare of the Ranſel. In that reach it is nine and eight fathome deepe.

From Stephen Iohnſons buye to Dockbuye the courſe is eaſtſoutheaſt, betwixt theſe two buyes ſtandeth a beacon on the ſouth ſhore, called the Ruytebeacon, by this buye the Eems is in the farewaie about ſeuen fathome deepe, this buye lyeth on the ſouth ſhore, in fiue fathome, upon a taile, which men might unawares ſaile within in ſailing up; the floud falleth verie ſtrōg behinde this buye into Dockegat, whereof men muſt be verie carefull. The marks of Dockbuye are, when that cloiſter of the Dam (being a flatte church cometh to the weſtwards of Oldcloiſter, ſo as one may euen ſee through betwixt them, then you haue the length of this buye, and then theſe marks ſtand about ſouth from you. From Dockbuye to the laſt buye the courſe is alongſt e.ſ.e. being paſt that you ſhall eſpie the beacons on the weſt ſhore, ſaile alongſt aboute by them. That reach from Eemſhorn to Delfzile lieth by litle and litle up more ſoutherly unto Wadem. The marks of Eemſhorne, are, a mill in Embderland aboute eaſt & by north from you, & a high houſe to the northwardes of the church: when the mil cometh to ſtand betwixt that houſe and the church, then you haue the length of Eemshorne: about Eemſhorne ſtand 3 or 4 beackons, which leade you euen unto Groningerland. Being come paſt Dockbuy, then you may ſound along by the weſt ſhore, until you come to Oterdom in 5, 6 & 7 fathome, come alſo no nearer to it, for it is verie ſteep: the eaſt ſhore in ſailing up, you might ſaile within it in ſix fathom, behind a plate called the Hondt, being a hard ſand, & further in lieth yet another plate called the Pape, alſo a hard ſand, & are faſt one to the other, but the weſt ſhore is ſoft and clay ground untill you come to Oterdom. You muſt keep al alongſt the weſt ſhore, & follow the beacons, which ſtande there alongſt the ſide.

Dockbuye.

This reach lyeth in firſt ſ.ſ.w. and ſouth & by weſt, and ſo about ſ.ſ.e. in a bight, and ſ.e. alongſt by Groeninger land,

For to avoide Reyder ſand or Iannens-ſand (that is a plate in the middeſt of the Eems, betwixt Oterdā & Reyde, whereupō at low water is no more the 10 foot, you muſt look out for Oterdom a flat church without ſteeple, ſtanding in Groninger land on the dyke, when you come thwart of it, edge over to Embderland, to wete, to the Knock, which is a ſteeple broken of, ſtanding in the water upon the point. Comming by the Knock then runn within two cables lengths alongſt by the north ſhore unto Loegerhorn, & then you ſhal not ſaile too near the plate. There ſtandeth a flatte ſteeple betwixt the Knock and Loegerhorne, called Gerritſwaert, when that you can ſee through that ſteeple, or when that ſteeple & the church come one to the other

Reyder ſand.

then

then are you thwart of that foreſaide plate.

When you ſail up the Weſter Eems, you muſt leaue al the buyes on the ſtarboard ſide.

A ſ.e. and n.w. moone maketh without in the Eems the higheſt water: in the Balgh a ſ.ſ.e. and n.n.w. moone: Before the towne of Embden, a ſouth, or ſouth & by weſt, and a north or north and by eaſt moone.

Iland Iuyſt. The Iland Iuyſt lieth a great league, or a league and a half e.n.e. from Borckum, which is a little lowe Iland, the weſt end is a high ſteep point & gray land, the eaſt end is higher then the mideſt. The church ſtandeth in the midſt upō the land, the ſteeple is ſomewhat ſharpe & ſtandeth at the eaſt end of the church, one cānot ſee the church but thwart of a low place or valley. Betwixt Borckum and Iuyſt goeth in the Eaſter Eems. From the weſt ende of Iuyſt lieth off a riffe two leagues, or two leagues and a half weſt into ſea, on the off ſide you may ſound it in 3 or 4 fathō, to the ſouthwardes of it goeth in the Eaſter Eemes.

Eaſter Eems. For to ſail into the Eaſter Eems, then bringe the church upon Borckum ſouth from you. If it be then cleare ſight, you ſhall be able to ſee through the ſteeple, ſail then right in with it, & you ſhal finde the outermoſt buye in 4 fathom, or 4 fathome and a half at low water.

From the outermoſt buye to the ſecond the courſe is eaſt & by ſouth. The end of Iuyſt riffe (betwixt the two buyes) is on the inner ſide ſo exceeding ſteep, that you cannot ſound it, but further in from the ſecond buye it is flatter, and there you may wel ſound it. The ſecond buye lyeth in three fathome at lowe water, upon the pointe of a long narrow banck or Hoeck, which ſhooteth off from the eaſt ende of Borckum, which men might unawares ſaile within, called Brewers plate, which tail is on the north ſide verie ſteep. Betwixt the firſt and ſecond buye it is 4 fathom deep at low water, thwart of the ſecond buye it is again deeper, to wete 8 and 9 fathome. From the ſecond buye the Eaſter Eems lieth in further eaſt & by ſouth, and e.ſ.e. and by litle & litle more ſoutherly, but with a floud you muſt goe on from the ſecond buye at leaſt eaſt, & eaſt & by north, that you may not be carried within the foreſaid point of Brewers plate. Iuyſt riffe is further in, of from the ſecond buye flat, ſo that you may ſound it in 5 or 6 fathome, & come not alſo nearer to it, leaſt you ſaile within Memers ſand: that is a taile, which ſhooteth off from the foot ſtrand, within Iuyſt from Memer ſand. As ſoone as you get again deeper water, then runne firſt e.ſ.e. and afterwardes on ſ.e. unto the beackon upon the High Horne, that ſtandeth upon the drye ſand on the ſtarboard ſide, edge up to the ſouthwardes or the weſtwardes behinde the beacon, there is the rode in 5, 6, or 7 fathom, & good riding for a ſoutherly winde.

Memer ſand.

The Eaſter Eems is thwart of it wide & broad, the eaſt ende of Borckum is thwart of it wide & broade, the eaſt ende of Borckum is flat, that you muſt not ſpare the lead, when you ſaile out or in there, with a ſhip of great draught.

Aboute ſoutheaſt and ſoutheaſt and by eaſte from the aforeſaid beacon lyeth the buye upon Kingsplate, being a tayl which ſhooteth off from the ſouth ſhoare, this buye with the aforeſaid beacon you leaue lying on the ſtarboarde ſide, there betwixt them both is a good rode on the ſouth ſhore. At Norden in Eaſtfrieſland ſtande two ſteeples cloſe one by the other, whereof the one is flat and thick, and the other long and ſmall, when theſe ſteeples come a ſhips length to the eaſtwards of the eaſtermoſt ſide of the Bant (being a litle Iland lying upon the Wat) then you haue the buye upon Kings plate, that are good longſt markes: and when the ſteeple of Iuyſt commeth to be northnortheaſt from you, that are good thwart markes of the ſame buye. Buye upon the Kings plate.

From the buye upon Kings plate unto the buye upon Hambrough ſand the courſe is ſ.e. and ſoutheaſt and by eaſt, which lieth in three fathome, this is Pilots water for greate ſhippes. You may runne from thence through a creeke, and come out againſt the ſouthermoſt buye upon the Weſter Eems. For to ſaile through this creeke, you muſt leaue the buye upon Hambrough ſand on the larboard ſide, and ſaile along by the beackons, leaving them on the ſtarboarde ſide, at both the endes of this creeke it is three fathome deepe, and in the middeſt fiue, ſixe, and ſeuen fathome, and lyeth about ſ.ſ.w. through, al alongſt in to the Weſter Eeems. Hambrough ſand.

Aboute a halfe league within Iuyſt, betwixt the beacon upon the High Horne and the buye upon Kings plate, on the eaſt ſide of the Eaſter Eems lyeth Memer balgh. It lieth in moſt north, that is a good roade for ſmall ſhips, that are bound to the weſtwardes, or out into ſea. Within the Balgh he that runneth in by the High Horne ſhall finde good roade for ſmall ſhippes, that are bound to the eaſtwards, which lieth in ſouth. Memerbalgh.

Comming from the eaſtwards, you may ſound Iuyſt riffe, which is flatte on the off ſide, without, in the pointe of the Riffe is a Share or Deadbalgh, with two pointes, betwixt them it is three fathome and an half deep.

A ſouthſoutheaſt and a northnorthweſt moone maketh (without in the Eaſter Eems the higheſt water.

To the eaſtwardes of Iuyſt lyeth Buys, the ſhorteſt and ſmalleſt Iland that is upon all this coaſt. It riſeth up in two Hommocks, whereof the hommock which is the moſt eaſterlieſt is the higheſt and ſharpeſt. Buys.

Buys deepe. Betwixt Iuyſt and Buys goeth in the Buys-deepe: the Wor. Counſel of Embden was wont to ſet it with buyes, but it is donne no more, in regard it doth ſo oftentimes ſhift.

Norderny. Two greate leagues to the eaſtwardes of Iuyſt lyeth Norderny, betwixt them both lyeth that litle Iland Buys, Norderny is to be knowne by a broad flat towre, which ſtandeth upon the weſt ende, but ſometimes men can hardly perceiue it. About the middeſt of the Iland, neareſt the eaſt ende, lyeth a high white ſand hill, thereby it is beſt to be known. Further the land is all full of hommocks. Betvvixt Norderny and Buys goeth in a channel, called the Noorder-deepe, or Nordernye.

Baltrum. A greate league to the eaſtwards of Nordernye lyeth the Iland Baltrum, vvhich is aboute two leagues long, a litle ſhorter then Norderny. Upon this Iland ſtandeth no ſpeciall thing, whereby men may knowe it: but upon the eaſt ende a high ſandhill, vvhich is ſharp aboue, the weſt ende is lovv ſandhilles. When the foreſaid high ſandhill is ſoutheaſt and by eaſt from you, then it is round to ſee to: upon the weſt ende there goeth a ſvvamp through.

Wichterey. Betvvixt Baltrum and Norderny runneth in a channel, called the Wichterie, there is no certaintie to be written of it, that men may truſt to, ſometimes there is tvvo fathome water & more, and ſometimes again no more then four or fiue foote.

The Iland Langeroogh lyeth a league to the eaſtwards of Baltrum, vvhich is four greate leagues long, and hath on the off ſide a faire ſtrand, and three or four ſandhilles, whereby men may knowe it, which lye from about the middeſt of the Iland unto the weſt ende, a good vvaies one from the other, the tops of them are plaine and flat. Betvvixt Langeroogh and Baltrum goeth in the Acumy, vvherein lye two buyes. It is no channel for greate ſhips, it lyeth out alongſt by the footeſtrand of Langeroogh, firſt northeaſt, & then ſomewhat more eaſterly, but it is not to be truſted to, becauſe it altereth and ſhifteth very often.

Acumy.

Spykerogh. Betvvixt Langherogh and Wrangeroogh lyeth the Iland Spyckeroogh, which is aboute a league long. At the eaſt ende there was wonte to lye a little Iland good to be knowne, called Luttick Spykeroogh, which is now altogether gone. Vpon Spykeroogh ſtandeth nothing, whereby men might knowe it, but it is a black land vvith hommocks and nobbes, like to the other Ilands: betvvixt Spyckeroogh and Langeroogh goeth in the Oxebalgh.

Oxebalgh.

Wranger-oogh. Wrangheroogh lyeth tvvo greate leagues to the eaſtwards of Langheroogh, vvhich is a great league long, being a litle plaine white Iland: upon the eaſt ende lye high broade white ſandhils: Vpon the vveſt ende, the Earle of Oldenburgh hath cauſed to be made a greate thicke towre, with two ſpires: vvhen they ſtand one right in the other, then you are by the outer buye of the Weſer; the aforeſaid tovvre men may ſee two kennings off at ſea. Betvvixt Wrangeroogh and Spyckeroogh goeth in the Harrel, about ſouth-ſoutheaſt, but it is not to be truſted to, becauſe it ſhifteth verie often. The Harrel.

The Acumye and Harrel are ſette both with buyes by the Wor. Counſel of Embden: theſe channels ſerue not but for ſmall ſhips, like as all the other lying betwixt the Eaſter Eems & the Weſer.

The land lyeth from Bornriffe to Wrangeroogh eaſtnortheaſt and weſtſouthweſt 29 or as ſome will haue it 32 leagues.

Of the tydes and courſe of the ſtreames.

BEfore the Scholbalgh the Lawers & the Schille, and alſo before the Weſter Eems a ſoutheaſt & northweſt moone maketh high water.

Before Embden and Delfziel a north, or north and by eaſt, and a ſouth or ſouth and by weſt Moone.

In the EaſterEems & Borckumbalgh a ſouth-ſoutheaſt and northnorthweſt moone.

Before the channels, betwixt the Eaſter Eems and the Weſer a ſouth, and ſouth and by eaſt, & a north, and north and by weſt moone.

In the farewaie betwixt the Flye & the Elue, the forefloud commeth out of the North ſea, & turneth about by little and litle with the ſunne, falling the halfe tyde eaſtnortheaſt alongſt the ſhoare, and the ebbe weſtſouthweſt.

Depths and grounds about theſe places.

SChiermonickoogh men may ſee in twelue & thirteen fathome four great leagues without the land.

Rottum and Borckum men may ſee in 14 & 15 fathome.

Thwart of Borckum the ground is groſſe red ſand mingled with ſome black.

Iuyſt, men may ſee in thirteen and fourteene fathome, three leagues without the land it is 12 fathome deepe.

Buys and Norderny men may ſee from the poope in 12 and 13 fathome.

Baltrum, Langeroogh and Wrangeroogh men may ſee in fourteen and fifteene fathome.

Courſes and diſtances.

THe coaſt alongſt theſe Ilands lyeth eaſtnortheaſt and weſtſouthweſt.

From

From Borckum Riffe to Wrangheroogh eaſt-northeaſt —— —— 16 leagues
From the Eaſter Eems or Iuyſt rif to the Steep-buye or Schortunne e. n. e. 20 leagues.
From the Eems to Flamborowhead weſt ſomewhat northerly —— 85 leagues.
From the Eems to Bovenberghen north and by eaſt —— —— 60 leagues.
From the Eems to Holyland the courſe is n. e. and northeaſt and by eaſt 21 or 22 leagues.

Howv theſe foreſaid lands doe shevv themſelues at ſea.

Thus ſheweth Schiermonckoogh being two leagues thwart off from you.

Borckum. Rottum.

Thus ſheweth Borckum and Rottum when you ſayle alongſt by them, being two leagues a ſeaboard the land.

Thus ſheweth the Iland Iuyſt, being aboute two leagues thwart off from you.

Norderny. Buys.

Thus ſhew the Ilands Buys and Nordernye, being two leagues thwartoff from you.

Thus riſeth Baltrum, when you are aboute two leagues a ſeaboard the land.

CHAPT. IIII.

Of the Jade, VVeſer, Elue and Eyder.

FOR to ſaile into the Iade or Weſter Weſer with a ſoutherly winde, runne to the ſtrand of Wrangeroogh in four fathome, with a weſterly winde runne no further then fiue fathome, and lead it in ſo by the ſtrand of Wrangheroogh, in four or fiue fathome, untill you come a good waies within, or to the ende of the footeſtrande of Wrangeroogh, there you ſhall finde the firſt buye in fiue fathome at low water: Menſer church ſhall then ſtand ſouth from you. Thwart of this firſt buye the redde ſand is verie ſteepe, which you muſt leaue on the larboard ſide, and the buye on the ſtarborde ſide, when you come in. Thwart of this firſt buye commeth a tayle ſhooting off from the ſouth ſhoare, that is the innermoſt pointe of the Stonebalgh, which men might at unavvares ſayl within, in three fathom and an halfe or four fathome, the firſt buye is laide upon the point of this tayle. The Stonebalgh goeth in to the eaſtwardes of Wrangheroogh, the ſouth ſide whereof is ſteepe, but the north ſide flat, which men may ſound. In this balgh it is ten foote deepe at low water. From the firſt buye to the ſecond, and alongſt to the third, the courſe is eaſt, the ſecond buye lyeth in two fathome and an halfe: the third, that is the Iade buye lieth in three fathom, upon the ſhouldeſt of the High-waie. It is verie uneuen betwixt the firſt and the third buye, you ſhall get twiſe depth of fiue or ſix fathome, and then again two fathome, or two fathome and an half.

For to ſaile from the Iade to the Weſer, then ſaile by the third buye over the ſhouldeſt of the High waie on eaſtnortheaſt to the Mellembuye, and you ſhall finde at low vvater, upon the foreſaid ſhovvldeſt place, or by the third buye, no more water then nine or tenne foote, and being over there you ſhall gette againe deeper water, and then you are in the Weſer: Reckon well your tydes, for the ebbe falleth very ſtrong northnorthweſt out at the Iade, & the floud to the contrarie, very hard inwards, ſo that you can hardly ſtemme the tyde, vvhen the weather is ſomevvhat calme, vvhereof you muſt be verie carefull.

For to ſaile further up into the Iade, leaue the foreſaid third buye on the larboard ſide, and go from thence meſt ſouth up, unto the pointe of the Dyke, called Hormmerſcheel, when you are come by the Dyke, there the Iade is vvide and broade, without the foreſaid Dyke ſtandeth a beacon or two, for ſhips that are bound over the Wadt: If you will ſaile further up into the Iade, then keepe the weſt ſhore, until you come thwart of the church vvithout a ſteeple, vvhich ſtandeth by the Dyke, there you muſt leaue the weſt ſhore, becauſe of the Aenten or Ieppe plate, vvhich ſhooteth off from the Veer, alongſt the vveſt ſhore, and ſometimes lyeth drye at lowe water. The weſt ſhoare lieth moſt ſoutheaſt ſomevvhat ſoutherly.

A ſouth and north Moone maketh the higheſt vvater upon the Iade, and it flovveth vvith an ordinarie tyde tvvo fathome and an half up and dovvne.

The Weſer.

FOr to ſaile up the Weſer, come no nearer Wrangeroogh then ſeuen fathome, being in ſeuen fathome, then edge off from the ſhore into 11 fathome, and you ſhall there finde the firſt buye at the comming into the Weſer, lying in ſeuen fathome upon the taile of the Redſand, Menſer church (that is a flat church vvithout a ſteeple in Vroukens land) is then ſouthſoutheaſt from you. Being thvvart of the firſt buye, and that the vveſt end of Wrangeroogh is ſouthſouthweſt from you, then you runne over the taile of the Red ſand in fiue fathome.

From the outermoſt buye to the ſecond, third, fourth, and fifth the courſe is due eaſt, vvhich lie all in ſeuen fathom, the ſouth ſide (to vvete the Red ſand) neareſt, each a pointe different from Menſer church, ſo that Menſerchurch lieth from the ſecond ſouth & by eaſt, from the third ſouth, from the fourth ſouth and by vveſt, and from the fifth ſouthſouthvveſt. The fifth buye is called the buye upon the Head, for to knovve that from all the other buyes, there ſtandeth a ſtaffe upon it of a halfe fathome long, vvith a vvhite knotte upon it. Over againſt the buye upon the Head lieth a vvhite buye on the vvhite grounds. Betvvixt all the foreſaid buies you muſt reckon vvel your tydes, the floud commeth out of the northvveſt, and falleth alongſt over the Reddeſand, and the ebbe to the contrarie. The right deep thvvart of theſe foreſaid buyes, in the comming in is eleuen fathome, but thwarte of the buye upon the Head, fiue fathom at lovv vvater.

Right before the Weſer lieth the Middle plate, the eaſtermoſt or the Innerſide beginneth right to the northvvards of the buye upon the Head by the vvhite grounds, and lieth alongſt the reach unto the third buye, to reckon from without, and is on both ſides flat for to ſounde about. On the weſt ſide of the foreſaid plate, lyeth a white buye aboute north from Menſer church, which you muſt leaue in coming in on the larboarde ſide. Middle plat

For to ſail from the buye upon the Head, out againe

Middle plat

Paskaart van de Weser, Elve en Eyder.

Namen sommiger plaetsen op de Elve en Eyder met letteren geteeckent

a De Schorton
b Coolton
c Witte ton op de nieuwe gronden
d Hoecton
e Roston
f Witte ton op de Steert van Roomaerder plaet
g. h. i. De tonnen op Pelgroms sandt

op de Eyder.

k De uijterste Eyder ton
l Ton op de Hont
m Baken op de Hont
n Yseren Hendrick
o o. Bakens op den yseren Hendrick
p De pijp na de Elve
q Hoedemer sandt
r Eylandeken Bulhoofden
s Baken op de Hulck

Duytsche mylen 15 in een graadt
Spaensche mylen 17½ in een graadt
Eng. en Fr. mylen 20 in een graa.

Aterendorp
KEYDINGERLA
Pelgroms sant
Oldenbroeck
Brunsbuttel
Groin
Roshaken
Ritsenbuttel
HOL
Ton uit Ros
Roomaerder sandt
Kinderbalgh
S A
Noorder Elf
Hildorp
TIA.
Noorder gronden
Heyde
Oldenworden
Busen
Zunddijck
DITMARS
Weslingburen
Noordijck
Noorder pijp
SCHEN.
Schulpersijl
Hockssandt
Lunden
Woldersum
Fredricx stadt
Tonningen
Eyder stu.
Harrebleck
Kating
Gardingen
S. Peter
EY
Reimers bode
DERSTEDT.

Namen sommiger plaet sen op de Iaa en Weser.

a De Steenbalgh
b Bakens van 't Wadt
c Aenten of Ieppe plaet
d De Iaa ton
e Ton opt Hooft
f Ton op 't Coers
g Mellem tonne
h Ton op Bollensyl
i Bakens op Bollensyl
k Eerste ton op 't Vlack
l Het Vlack
m Cappelmans sandt

Blixum
Buttia digerlant.
Waddens
't Veer
OOST-
Nyerzyl
FRIES
LAN D T.
Hoeckzyl
Roukezyl
Garmessyl
Hornmerscheel
Menserkerk
Opt wadt.
Warduermerzyl
Wedwaert
Lange Woerden
Swarte gronden
Bollensyl
De hoge wegh
Teutel
gronden
Witte gronden
Zum
der
Roode sandt
Wangeraoghe
Spikeraoghe
Lange raogh
Osse balgh
De Pharrel
Middelplaet
De Weser
Noorder Brechalgh
Zuyder Brechalgh
Noorder ey
Vlacte of steert van Vogelsandt
Hevvlige Lant
7

A

againe to the eaſtwardes of this plate unto the Elue, then ſounde it out aboute the white grounds, in four or fiue fathome, untill you be out in the ſea.

For to ſail further up into the Weſer, the courſe from the buye upon the Head unto the ſixth buye is ſ. e. & n. w. Menſer Church ſhal then lie from you ſouthweſt and by ſouth, the Weſer is thwart of it aboute 20 fathom deep. From the ſixth buye to the ſeuenth, that is, the buye upon the Cours, or the Wapperbuye, or the ſouthweſt buye, becauſe Menſer church lyeth ſouthweſt off from it, the courſe is ſoutheaſt. The Iade buye lieth about ſouth, or ſouth & by weſt from this buye. From the buye upon the Cours unto the Mellem buye the courſe is yet ſoutheaſt, which you might ſail within at unawares in ſixe fathom. Menſer church lyeth off from it ſouthweſt & by weſt. From the Mellem buye to the buye upon Bollenzile the courſe is ſ. e. ſomewhat eaſterlie, you muſt reckon your tides there verie well, becauſe the floude falleth exceeding hard into the weſt ſhore. Langworder church lieth right ſouth and by eaſt from that buye upon Bollenzile, over againſt it upon the point of the black grounds lyeth a white buye, come no nearer to it at half floud then 4 fathome and an half, you might unawares ſail within that point (in ſayling in) in 4 fathom. From the buye upon Bollenzile to the beakon upon Bollenzile the courſe is ſ. ſ. e. or ſoutheaſt & by ſouth. Langworder church lieth about ſouth from that beacon, you muſt leaue it on the ſtarbord ſide coming in. Within that beacon upon Bollenzile is a good rode for a weſterly winde. From the beakons upon Bollenzile to the firſt buye upon the flat, the courſe is ſ. e. til you come ſomewhat beneath the beacon, & then along e. ſ. e. The marks of the firſt buye upon the Flat is, when you can ſee through the belhoals of Langworder ſteeple, then you are thwart of the firſt buye, Langworder church is then frō you ſomewhat more ſoutherly then ſ. ſ. w. From the firſt buye upon the Flat to the ſecond, the courſe is e. ſ. e. Betwixt theſe two buyes ſtande fiue beackons on the larboard ſide, upon the black grounds. From the ſecond buye upon the flatte to the Meyland the courſe is ſoutheaſt and by ſouth. Being come thwart of Wadnis or the Meyland, ſayle then cloſe along by the green ſhore, until you come within Blixem, there is the rode for greate ſhips that are bound to ſea.

Buye upon Bollenzile.

Like as upon the Iade, ſo alſo upon the Weſer a ſouth & north moone maketh the higheſt water, it floweth there alſo two fathom & a half up and downe.

South grounds.

To the eaſtwards of the Weſer lye the ſouth grounds of the Elue, there goe in, two fair deep Balghs or Creeks of 10, 12, and 13 fathom. The Til, called alſo Broadbalgh, is the vveſtermoſt, & lieth ſo far to the weſtwards, that men can but euen ſee the New worke from thence.

If it ſhould happen that coming to the eaſtwards of the Weſer, you ſhould be beſet upon the ſouther grounds, being a lee ſhore, and be in danger, then ſaile to the ſouth groundes in four, 5, and 6 fathome, but not much nearer alſo, for they are ſomewhat ſteep. When you (running ſo along by theſe grounds upō the ſame courſe) ſhal get 8, 9, yea 10 or 12 fathome ſofte ground, then that is certainly of the Broadbalgh or Weſter Till, take then the ſounding of which ſide that you will, & ſound it about by the grounds in 4 or 5 fathom, and you ſhal finde amongſt the ſands ſmooth water, and good rode, and may lie ſheltered for all winds. The Weſter Till lyeth in firſt e. ſ. e. alongſt by the north ſhore it is deepeſt, on the ſouth ſhore you cannot ſaile within any tailes, in ſailing out, but you may in ſailing in: when you come ſomewhat further in, it lyeth up more to the ſouthwards: there are divers Balghs or chanels, where men may ſail through that are acquainted. Weſter Till.

The Eaſter Tille or Broadebalgh lyeth betwixt the Weſter Til & the Hondtbalgh, which runneth in ſeuen fathome into the eaſtermoſt pointe, (or the olde Scorhorne) that is a taile which lyeth off a good waies, and which you might at unawares ſaile within in ſeuen fathom comming from the weſtwards. This Till lyeth in alſo (like as the other) firſt eaſtſoutheaſt, but a little further in more eaſterly. Here alſo you may take the ſounding of which ſide or ſhoare that you will. Being come within, you ſhall get ſmooth water off the ſands for all windes. In this channel is not leſſe then ſeuen fathome water. Eaſter Till.

The Hondtbalgh lyeth right into the weſtwards of the Steep-buye or Schor-horn. If you will goe in there with ſmall ſhippes for to ſaile over the Wadt into the Weſer, then goe (when you haue the Steepe-buye) in ſouthſoutheaſt. The Hondtbalgh is without indifferent wide, keepe that courſe untill you come thwart of the beacons, which you muſt leaue on the ſtarborde ſide, you may well ſound in aboute the off ſide of the Schor-horne, but not the weſt ſide, by it lye plates, which you might ſail foule of in nine fathome, in comming in, but on the Schorhorn you cannot doe amiſſe. Hondtbalgh

Holy land.

THe Iland Holy land and the outermoſt buye in the Weſer, lye one from the other, ſouth ſomewhat weſterly, & north ſomewhat eaſterly. When it is cleare and good ſight, you may ſee Holy land, when you lye in the

the Weſer, by the buye upon the Head. Holy-land and Bornriffe lye one from the other ſouthweſt & by weſt, and northeaſt & by eaſt, according to the common opinion, two and thirtie leagues. When you come from the weſtwards, and begin to get Holy land in ſight, it ſheweth it ſelf vvith a high reddiſh ſteep point, which is flat aboue. For to ancker or make rode under Holy land, comming from the weſtvvards, then runne to that land in tenne or twelue fathome. When you ſail towards the ſouth point, & come ſomewhat near the land, you ſhal eſpie a rock, like unto a ſmall towre, cloſe by the high land, called the Monck, which is almoſt ſo high as the high land. About ſouthſoutheaſt an Engliſh mile, or a litle more from that rock, lieth a rock under water. If you keepe your ſelf in eight and nine fathome, then you runne without this rock, and cannot take anie hurte of it: When the Monck is covered of the other land, then you are thwart of this ſuncken rock. When the foreſaid Monck commeth a hand ſpikes length, paſt or without the other land, there is the rode, and good ankering in tenne and eleuen fathom, the ground is there faire and cleane, except it be of wracks of loſt ſhips, or loſt anckers, which are there manie. Lying there in nine, tenne, or eleuen fathome, you haue ſhelter for a weſtſouthweſt, northweſt and north windes. From the point where the Monck ſtandeth by, ſhooteth off a litle riffe from the ſhoare, which men may ſound in three fathome, you may alſo runne in fiue fathome from the ſhoare, and ſaile cleare of the foreſaid ſuncken rock, to wete, through betvvixt the ſuncken Rock, and the litle riffe: but if you runne into deeper water, to vvete, in ſeuen fathome, you ſhall runne right upon the ſuncken Rock. In eight or nine fathome you doe runne aboute without the ſuncken Rock.

Monck.

Rock under water.

From the north ſide of Holy land lyeth off an evill Riffe, almoſt a league into ſea, ſo that you cannot come no nearer the vvhole north ſide, then in nine or tenne fathome. If you will goe about to the northwards of Holy land, being come ſo farre that the eaſt ende of Holye land come to be ſouth and ſouth and by eaſt from you, ſaile then freely unto the Scholvers pointe, that is a flatte point, vvhich you may ſounde in fiue, ſixe, and ſeuen fathome. If ſo be that you will runne in eight fathome off from it, you ſhall runne aboue tvvo greate leagues from the ſhoare. The right farevvaie betvvixt the Hever and Holye land is not more then nine or tenne fathome deepe. When you come aboute the pointe to the rode, and that Scholvers pointe lye northeaſt, and the Rock ſouthweſt from you, there is good lying in fiue fathome.

Scholvers point.

Scholvers point is the point where the South hauen lyeth vvithin, which lyeth from the high land about eaſt into ſea. From the outermoſt ende of Scholvers pointe lyeth a banck of three fathom, unto the point where the Monck ſtandeth, vvithin it is verie good lying for ſhips of litle draught, that is called the South hauen of Holy land. A ſouthſouthweſt and northnortheaſt moon maketh there the higheſt water.

South hauen

Of the Elue.

THe Rode of Holy land & the outermoſt buye of the Elue, called the Schortunne or the Steep buye) lye right ſoutheaſt & by eaſt, and northweſt and by weſt eight leagues aſunder, which lyeth right to the northwardes of the Schorhorn, that is the outermoſt point of the New workes grounds, on the ſouth ſide of the Elue, the right deepe of the Elue runneth in alongſt to the northvvards of it. On the northſide of the Elue lye the North grounds, which lye ſomevvhat flat farre off to ſeawardes upon the northweſt ſide. The ſouth end of the Northgrounds called Voghelſand, runneth from the foreſaid buye a good wayes weſt and by north into ſea, with a narrowe taile of perfect harde ſand, about a half league broade, which waxeth by little and little, the farther from the ſhoare the deeper. Three leagues from the foreſaide buye, there is upon it eleuen fathome vvater, vvhen you ſaile on north from the Steep buye, you runne over it in three fathome, or three fathome and a halfe, but it doth ſoone deepe againe in fiue, ſeuen, eight, and 10 fathome ſoft ground, that is in the creeke of the North Elue. To the ſouthvvardes of that aforeſaid Voghelſand in the right farevvaie of the Elue (for him that commeth from the vveſtwardes) it is alſo ſomevvhat ſoft ground and fourteene and thirteene fathom deep, to the ſouthvvards of it, tovvardes the ſouther or Steepe grounds, the ground is againe verie hard, & the grounds verie ſteepe, you may not come nearer them (eſpecially by night or darke vvether) then in eleuen or tvvelue fathome, if you come nearer to them, you might ſail foule of the vveſter Till, or Souther-Broade-balgh, vvhich runneth up to the ſouthvvards into the grounds to nothing.

Tail of Voghelſand.

North Elue.

When you come from the vveſtvvardes and ſaile to the Elue, you ſhall finde betvvixt Holy land and the Weſer, and thereabouts ſomwhat to the eaſtwardes, depth of twentie fathome, untill that you come well halfe waies to Holy land, toward the Steepbuye, then it doth begin to ſhowld from eighteene to ſixteene & fourteen fathome, cloſe by the Steep buye it is twelue fathome deepe.

If

If you come by night alongſt by the Steepe or Souther grounds, with a ſoutherly winde in twelue or thirteen fathom, and goe on eaſt and by north, you ſhall at laſt meet with the ſhowlding of the New-workes grounds, right to the northwardes of the Hondt-balgh in eight and ſeven fathom, there you muſt then let fall your ancker, for to ſtay for the day, & you ſhall finde your ſelfe not farre from the buye. With northerly windes you muſt anker further from the ſouth ſhoare in the foreſaid ſhowlding in eleven or twelue fathom.

To the northwards of the foreſaid narrow taile, or ſhowlding, which lyeth off from Vogelſand, runneth in a great bight or Slenck into the norther grounds, called the Norther Elve, it is in the going in ſomewhat within, ſo broad, that you may therein turne to windewardes, but within it runneth narrow & ſharp too, and at laſt to nothing, (ending almoſt againſt the white buye which lyeth upon the Elue upon the taile of the New-grounds) it is going in more then halfe-wayes thirteene and twelue fathom deep, and ſoft ground, very much like the right Elve. It happeneth oftentimes by dark wether that the ſhips (thinking that they are entred into the right Elve) run in there, ſomtimes with great danger, eſpecially with weſtnorthweſt windes, for they muſt come out there back againe. When you ſaile off from Holyland on eaſtſoutheaſt, you ſhall haue depth of twelue or thirteene fathom being a league off from it, that you leeſe the white cliffe out of your ſight, then you ſhall get one even depth of thirteene fathom, and ſoft ground, all alongſt untill you come within the foreſaid north Elve. When you ſhall perceiue that you are entred in there, you may (when the New-worke is a little more ſoutherly then ſoutheaſt & by ſouth from you) run alongſt over the taile of Vogelſand in 5 fathom, and ſo come againſt the Steep-buye upon the right Elve.

Norther Elve.

For to ſet ſaile by night from the road of Holyland, the courſe is ſoutheaſt and by eaſt, then you ſhall runne over the foreſaid taile of Vogelſand in ſeven and eight fathom, and ſomewhat hard ſand ground. If you then run a litle more ſoutherly, you ſhall get againe twelue and thirteen fathom, and ſomewhat ſoft ground, that is, the right deepe or chanell of the Elue betwixt Vogelſand and the ſteepgrounds. If you run then more ſoutherly, you ſhall get againe ſomewhat hard ground of the ſouthergrounds, which are (as hath been herebefore ſaid) very ſteepe and hard, when you come neere them in twelue or eleven fathom, you muſt edge of again from them unto twelue or thirteen fathom, and alongſt by them towards the Steep-buye, unto the foreſaid ſhowlding of the New-works grounds, and there ſtay for the day light.

When you come by day from Holyland or from the weſtwardes, and that you get Newworke in ſight of you, bring that & the Cape one in the other, and ſaile ſo right in with them, then you ſhall finde the Steep-buye, which lyeth (as hath beene already ſaid) towards the ſouth land on the ſide of the Schorhorn the outermoſt point of the Newgrounds in 10 or 11 fathom. From the Steep-buye to the Koolbuye, that is, the ſecond buye, the courſe is due eaſt, which lieth in 8 fathō. Vpon the Newwork ſtand 3 countrey mens houſes, the middlemoſt of them, and the ſteeple of the New-worke come one in the other when you come to the ſecoud buye. The third buye lyeth in ſixe fathom, from the Koolbuye eaſt and by north ſomewhat eaſterly, but neereſt eaſt and by north. The fourth lyeth in fiue fathom from the third eaſt and by north. Betwixt theſe buyes a litle within the third, runs a deepe creeke eaſtſoutheaſt into the Newworkes grounds, called the Kinder-balgh, which is wide at the entring in, and at halfeflood well nine fathom deepe, but runneth at length altogether drye to nothing. Hee that commeth running alongſt by the Southgrounds, might lightly get in there, therefore the third buye lyeth a little further off from the ſouth shore, becauſe men should avoyd that creek. Betwixt the third & fourth buye on the north ſide of the deepe lyeth a white buye in 3 fathom, upon the taile of the Newgrounds, which men might ſail within, when they come inwards, that you muſt leaue on larbord ſide, and all the black buyes on the ſtarboard ſide.

Kinderbalgh

Newgrounds

The foreſaid white buye & the New-work lye n.n.e. and ſ.ſ.w. one frō the other, to the eaſtwards of it the north ſide is very ſteepe. The fifth buye lyeth in 3 fathom & a halfe, or 4 fathom, and lieth from the fourth due eaſt.

The ſixt buye, that is the point buye, lieth in 6 fathom from the fourth and fift due eaſt. In the right deep to the northwards of theſe forſaid black buyes frō the Koolbuye to the point buye in the right fareway, it is al alongſt 6 & 7 fathom deep. From the point buye to the buye in the Roſſe, the courſe is ſoutheaſt, which lieth in 7 or 8 fathom, when the Ros beakon commeth to the litle ſteeple of Gron or Groen, then you are thwart of this buye. Half wayes betwixt the point buye, and the buye in the Ros, lyeth yet another buye on

the ſouth ſide, which is there betwixt them both exceeding ſteepe and needle too. Right eaſtſoutheaſt from the poynt buye over againſt the buye in the Ros, ſomwhat further inwards, lyeth a white buye upon the taile of Romaerl plate, which men might at unawares ſaile within, in foure or fiue fathom when they ſaile upwards. When the litle ſharpe ſteeple of Woordt commeth to the weſtwards of Oldenbroek (that is a church with two ſpires upon one ſteeple) then they are ſouth from you, from thence inwards you may ſound Romarl plate in ſixe fathom without danger, otherwiſe it is on the off-ſide very ſteepe. From the Ros beakon to Brunsbuttell are fiue leagues, betwixt the buye in the Roſſe, and the buye upon Romaerl plate begins a ſand lying right in the middeſt alongſt the fareway about two leagues long, called Pilgroms-ſand, upon it is all alongſt no more then two fathom water, or a litle more, upon it lie three black buyes, and overagainſt it on the north ſide, two white buyes, you muſt ſaile through betwixt them, alongſt to the northwards of that ſand, being paſt it, you ſhall come upon the flat. There lie yet two buyes which you muſt leaue alſo on the ſtarboard ſide in ſailing up, before you come to Brunsbuttel. All the depths here before mentioned, are reckoned at half flood.

From Brunsbuttell to the buye upon Salſhorne, or Vriburgher-ſand, the courſe is eaſt, and eaſt and by north alongſt by the northland. From Saltshorn to the buye againſt the Steur eaſt and by ſouth, and eaſtſoutheaſt, from the Steur to the buye upon Gringeroorts-ſand ſoutheaſt, and ſoutheaſt & by eaſt, that lieth againſt Bilenburgh more then halfe waies in the deepe. Betwixt this buye and the buye upon the Steur lieth another buye in the fare-way. From the buye of Gringeroort to the buye upon Staderſand ſoutheaſt and by ſouth, and ſouthſoutheaſt. This buye you muſt leaue on the ſtarboard ſide. From Staderſand to Willemsvliet, or the buye upon the Luye it is ſoutheaſt, and ſoutheaſt and by ſouth, and from thence to the buy upon Terloo eaſtſoutheaſt. From thence to the buye upon Haneball, the courſe is eaſt and weſt. From Haneball to the buye upon Blanknes ſand eaſt and eaſt and by north, you muſt keepe that buye right with a great tree, and then run alongſt by the north land untill you be paſt the buye.

From Blanknes ſand unto the buye in the bight, the courſe is e.ſ.e. & from thence unto the Eckhout eaſt & by north in the right chanel it is there 3 or 4 fathom deep, there lie the great ſhips for to lade and unlade.

The Eyder.

SIxe leagues to the northwards of the Elve lieth the Eyder, with many ſhowlds lying far out without the land, chiefly and moſt on the ſouth ſide: on the north ſide of the deepe alongſt by the land of Eyderſtee lieth a long ſand called the Broad-back, or New-grounds, on the ſouth ſide lie Blauoort, the Iron Hendrick, the Hondt & Heckſand. To the ſouthwards of Blauoort, and the Iron Hendrick, about a league to the ſouthwards of the mouth of the Eyder, goeth yet a Deep in, called the North Pipe, where men may ſaile in, & come out againe by the Hondt upon the Eyder. In the Eyder lie on the ſouth ſide of the Deepe 7 black buyes, which you muſt leaue all (in ſailing in) on the ſtarboard ſide, and on the north ſhore, which you muſt leaue on the larboard ſide. The outermoſt buye lieth from the ſteep buye right north, and from Holyland eaſt or a litle more northerly 7 or 8 leagues. When you fall with the land with that courſe, you ſhal eſpie to the northwards of the Eyder, upon the land of Eyderſtee, a ſharpe ſteeple indifferent high, called Gardinghen, bring that over or to the ſouth ſide of the litle ſand-hils lying on the north ſide of the Eider, called the Souther Heads, they ſhall then ſtand from you northeaſt and by north, or a litle more eaſterlie, ſaile right in with them ſo, and you ſhall fall with the outermoſt buye, when that then the ſharpe ſteeple of Weſlingburen, ſtanding to the ſouthwardes of the Eider in the land of Ditmarſen, cometh to be eaſt or a litle more ſoutherly from you, then you haue the length of the foreſaid buye, & then S. Peters church upon the Eiderſtee to the weſtwards of Gardingen, not farre from the ſea ſide, ſhall ſtand from you northnortheaſt. Thus, or comming out of the ſouthweſt upon the foreſaid marks of Gardinghen, and the Southerheads, you ſhal run over the ſhowld of Blauoort, which men do call alſo the taile of the Hondt lying off from Blauoort almoſt half waies to Holyland. It is alſo by ſome called Blauoort. Or coming from the northwards, bring the foreſaid ſteeple of Weſlingbueren eaſt or a litle more ſoutherlie from you, and ſail ſo right in, until that Gardinghen cometh to the foreſaid Southerheads, or that S. Peters church bee n.n.e. from you, in doing ſo, you ſhal not miſſe alſo the outermoſt buye. From the outermoſt buye to the ſecond, third & fourth, it is all one courſe e.ſ.e. the ſecond lieth upon the ſhowldeſt of the chanel at low water in 16 foot, the third in 4 fathom, and the fourth in 5 fathom.

Theſe

Theſe three laſt lye alongſt the north ſide of Blauoort, on the ſouth ſide of the deepe. In ſailing in you muſt leaue them all on the ſtarboard ſide, and run alongſt to the northwards of them. From the fourth to the fift, that is, the buye upon the Hondt, the courſe is eaſt, which lyeth thwart of the Hondt, on a point which lyeth off from Heckeſand, which in comming in men might at unawares ſail within alongſt to the ſouthwards of the buye, therfore you muſt leaue that alſo (as well as the former) on the ſtarboard ſide, and ſail alongſt to the northwards of it. Betwixt this foreſaid buye upon the Hondt, and the fourth, lyeth another buye upon the north ſide of the deep, upon the ſouthermoſt point of the New-grounds, which you muſt leaue on the larbord ſide, and run about to the ſouthwardes of it. From the buye upon the Hondt to the ſixt, the courſe is northnortheaſt, and two fathom deepe. From the ſixt to the ſeventh and laſt buye northeaſt and by north, and the deep alongſt to the northwards of it three fathom. Being paſt the laſt buye, follow the beakons which ſtand alongſt on the north shore, untill you come to Hulck, run cloſe alongſt to the ſouthwards or to the eaſtwards of them for to avoid a taile of ſand which commeth off from the eaſt shoare, which men might unawares ſaile within into a Dead-creeke. From the Hulck to Schulperzile the courſe is eaſtſouth-eaſt, In that reach the beakons ſtand on the ſouth ſide upon the Ballaſt plate, & you muſt run along to the northwards by them leaving them on the ſtarboard ſide. From Sculperzyle to Tonninghen the courſe is north-northeaſt. Before Tonninghen the Eyder is at the ſhowldeſt, and at low water no deeper then one fathom and a halfe. From thence further in towards the New-town called Frederick-ſtat, there is depth enough. The depths here before mentioned are all to bee underſtood at a low water. From Tonninghen towardes Wollerſum the Eyder lieth alongſt northeaſt and by eaſt. From Wollerſum towards Harebleck northnorthweſt. From Harebleck towardes Reymers-bode northeaſt. From Reymers-bode towards Nyenzyle eaſtſoutheaſt. From the Nyenzyle to the Nyen-veere ſouth.

Betwixt the fourth buye upon the Eyder & the fift, that is, the buy upon the Hondt, over againſt the buye upon the ſouthermoſt point of the New-grounds, ſtand two beakons a little to the ſouthwards of the foreſaid 2 buyes, the weſtermoſt upō the eaſt point of the Blauoort, or the Iron Hendrick, & the eaſtermoſt upon the taile of the Hondt. Betwixt theſe two beakons goeth in through a deep ſouth-eaſt, or ſoutheaſt and by eaſt, where you may ſaile through alongſt by the beakons upon the Iron Hendrick (which you muſt leaue then on the ſtarboard ſide) until you come into the end of the North-pipe, which lies frō thence about weſt into ſea. You may ſound in at the North-pipe, comming in out of the ſea by the ſouth ſhoare in 3 and 4 fathom, untill you come to the forſaid beakons, and then about by them northweſt or ſomwhat more weſterly up unto the Eyder, or els you may run further alongſt by the foreſaid ſouth ſhore, untill you come about the beakon upon Hoedmerſand, and then forth betwixt the little Iland Bulheads and buyſen, alongſt by the beakons upon Hoedemerſand, with many points and bights on to the ſouthwards, and come out at laſt upon the old Elve, about northeaſt from the New-work againſt the New-grounds, which is not wel to be ſailed, but of thoſe that are there very well acquainted.

Alongſt by the north ſhoare of the Eyder, cloſe to the ſouthwards of the litle ſand-hills, the Southerheades, runneth in yet a Land deep, eaſt and eaſt and by north in, and commeth out again upon the Eyder by the Hulck, that ſerveth not but onely for ſmall ſhippes, there remaineth at low water but fiue foot.

Of the tydes, and courſe of the ſtreames.

BEfore the Weſer and Elve, and alſō in the Eyder a ſouth & north moon maketh high water. The flood commeth there out of the northweſt, and the ebbe out of the ſoutheaſt, and fall very ſtrong over the grounds that lie out there.

Vnder Holiland a northnortheaſt & ſouth-ſouthweſt moon maketh full ſea.

Depths and grounds about theſe places.

THhwart of Botjadigerland, Keidingerland and Ditmarſen, the grounds lye ſo farre without the land, that you cannot ſee the coaſts except you climb up into the top.

About Holyland it is deepe 7, 8; and 9 fathom, to wit, on the inner ſide, but without on the weſt ſide 15, 16, 18 and 19 fathom, in ſuch depth you may ſee the land of Holyland from the weſtwards.

Courſes and diſtances.

FRom Wrangeroogh to the New-worke eaſtnortheaſt 8 leagues
From the outermoſt buye upon the Elve to the Eyder, north 7 or 8 leagues

From Langheroogh to Holyland north-northeaſt 10 leagues
Holyland and the outermoſt buye in the Weſer lye north ſomewhat eaſterly, and ſouth ſomewhat weſterly. The buye upon the Head in the Weſer, and Holyland lye north and ſouth aſunder 8 leagues
The ſteepe buye on the New-work and Holyland lye ſoutheaſt and by eaſt, and northweſt and by weſt aſunder 8 leagues
The outermoſt buye in the Eyder and Holyland lye eaſt ſomewhat northerly, and weſt ſomwhat ſoutherly aſunder 7 or 8 leagues
From Holyland to the Holmes before Yarmouth the courſe is weſtſouthweſt, or ſomwhat more weſterly 72 leagues
From Holyland to Scarborough and Flamborough head, weſt or ſomwhat more ſoutherly 93 leagues
Faom Holyland to Tinmouth, or New-caſtle, weſt ſomwhat more northerly 106 leagues
From Holyland to Lieth in Scotland weſt and by north and ſomewhat more northerly 120 leagues
From Holyland to Boeckenes northweſt and by weſt 122 leagues
From Holyland to Hanglip in Hitland northweſt 146 leagues
From Holyland to Bovenberghen north and by weſt 50 leagues
From Holyland to the Horn, or Dodebergh north 32 leagues
From Holyland to Knuyts-deepe, or Ryperdeep the courſe is north, and north and by eaſt 25 leagues
From Holyland to the Deepe of Silt, or Liſt, north and by eaſt 19 leagues
From Holyland to Ameren or Small-deepe, the courſe is northnortheaſt ſomewhat eaſterly 10 leagues
From Holyland to the outermoſt buye in the Hever northeaſt 8 leagues
When you lye by the outermoſt buye in the Hever in cleare wether, you may ſee Holyland

Howv theſe foreſayd Ilands doe ſhevv themſelues at ſea.

Langheroogh ſheweth it ſelfe thus when you are about two leagues off from it.

Thus ſheweth Spikeroogh when it is about two leagues from you.

Thus ſheweth Wrangheroogh when it is about two leagues thwart off from you.

Thus ſheweth the New-land, or New work when you are at the entring of the Elve.

White Cliffe.

Holyland northeaſt and by eaſt five leagues from you, ſheweth it ſelfe thus.

Holyland northeaſt and by eaſt from you ſheweth thus.

CHAP.

Duytsche mylen 15 in een graadt

Spaensche mylen 17½ in een graadt

Engelsche en Fransche mylen 20 in een graadt

Rypen

Hugum

Phanu

Suyder hoeft

Manu

Coersant

Rem

Hertu gen

Langhelch

Suyderzeyl

Schilling hoogt

Leyderzeyl

Vlieterstant

Phamy knuts

Dolsant

Dolsbergh

Rijsgrund

Paſcaarte varde Eÿlanden Stroomen en droochten aen de Cuſt van Iutlandt tuſſchē de Eÿder en Riſhorn.

Tonderen
Lutke Tonderen
Borlum
Dogſum
Hafstede
Huſum
Tonnegen
Lunden
Garinge
Oſterhever
Oſter
Suyderhaafen
De Hondt
Gorde
Strant
Strant
Pieworm
S. Jans
Vore
Oelan
Silt.
Keidommerkerck
Amerom
Vaarwat
Viſchers gat
Roode diep offte Silter diep
Amerumbocht
Smalle diep
Noorderhogh
Suythoogh
Hever
Eyder
Blauw oort
Schoberhoeck
Heyligeland

CHAPT. V.

The Coasts of Jutland betwixt the Eyder & the Horne, or Dodenbergh.

FRom the new-work, or Steepebuye to the Hever, the course is north 10 leagues, when youcome about halfe wayes betwixt them both, you shall meete with the foresaid sand or taile of Blauoort in the depth of two or three fathom. In this fareway you must be very carefull of your tydes, that you come not upon the grounds, which lye farre out a seaboard the land, the foreflood falleth there very strong thwart over the grounds towards the land, and the ebbe to the contrary.

For to saile from Holyland to the Hever, goe on northeast somwhat easterly, or according as the winde and tyde shall be, and runne towards the grounds, untill you come in sixe or seven fathom, and then you shall espye a steeple which is sharpe, and indifferent high, called Pielworme, bring that northeast and by north from you, a mast length to the south wards of the southermost Cow-house upon the litle Iland Nuball, keep that so standing, and saile towards it, and you shall so finde the outermost buye, from that to the second buye goe on northeast, and northeast and by east; being come to it, Pielworme steeple shall stand northnortheast from you. From the second buye alongst inwards, the course is northeast and by east. Being come in so a good wayes, you shall finde two beakons on the starboard side upon a drye sand called the Quade, there over against cometh the North balgh in the right Hever. From the first beakon to the second and third the course is east and by north, sail all alongst by the beakons, leaving them on the starboard side. To the northwards of them, betwixt the first & third beakon, it is full of sands and plates, where you might at unawares saile within. By the third beakon cometh the souther Balgh into the Hever. Frō that third beakon to the two other beakons, the course is n. e. and by east, being past that, you shall come by the greene land on the starboard side, there it is a square, deepe, large and broad channell, from thence you may saile alongst amidst the chanell unto Hoesem at the bridge, or ancker thereabouts every where, where you will.

Without in the Hever the north side is steepe, therefore keepe the south side untill you come within the beakons, in the chanell is at halfe flood two fathom and a half water, and without the chanell it is very farre flat. Somewhat without the Hever lyeth also a banck, whereof men must bee carefull, when they will sail in there. A south & north moon maketh there the highest water.

The South Balgh goeth in to the southwards of the foresaid bank the Quade, in right with the little Iland Vtto, and alongst to the northwards of it, it is from without a league and a halfe to saile to Vtto. From Vtto it lyeth in alongst northeast and by north, and commeth out into the Hever by the third beakon.

The North Balgh lyeth in to the northwards of the Hever about east and by north, or west and by south from Pielworme, right in with the foresaid little Iland Nuball, which you must leaue on the lorboard side running in alongst by it, and so come into the Hever, against the foresaid drye sand the Quade: you may also (coming in at the North Balgh) saile up to the northwardes from the Iland Nuball unto the end of Strant, till you come thwart of a flat church, and ancker there behinde the showlds, that is a deepe Balgh or Creek.

Smalle-deepe.

THree or foure leagues to the northwards of the Hever, lyeth the Smalle-deepe. For to saile off from Holyland towards it, goe on northeast and by north, and runne to the grounds, about west and by north, from Pielworme, the south end of Ameren shal then be north or thereabouts from you. Seek then to the south grounds, and sound about by them, and there you cannot doe amisse, it is a flat rising ground farre without the land. On the north side lye many sands, showlds & points, that lye out, which men might (without good heed-taking) saile within: saile in therfore alongst by the south side north and by east, northnortheast, and northeast and by north, and so you shall finde one showld or beach, leaue that one the larboard side. If you leaue that on the starboard side, you should runne into a dead Balgh, or creeke, wherein is at the first at least seven fathom depth, but runneth at last by little and little to nothing: you may also runne along by that foresaid showld by your lead, untill you come within it, coming then thwart of the south end of Ameren, you might unawares sail within the south grounds behinde a share which shooteth off from the grounds of Vooren, therefore keep the south side untill that you come thwart of the Iland Vooren.

The Red-deepe.

FOr to ſaile in at the Red or Silter-deepe comming from the northwards, or out of the ſea, run in ſight of the Iland Ameren. About the middeſt of Ameren lyeth a white round hill a litle higher then the other Hommocks in a low plaine valley. Bring that northeaſt from you, and run in ſo right with it until you come within the riffe that ſhooteth off from the Voortrap, and commonly is called Ameren Borne, and ſo you cannot take any hurt of it, and then you ſhall haue upon the point of the Riffe not leſſe then three fathom water, and within the ſame Riff eleven, twelue, or thirteen fathom. Saile ſo in untill that the north end of Ameren bee north and by eaſt from you, and then run right with the north end of Ameren, untill you come within the drye ſand, and there you may ancker where you pleaſe, or ſaile ſo farre in as you will, and ſound it all alongſt by the Riffe. The ſtrand of Ameren is a faire ſtrand without any tailes that men might ſaile within. When the foreſaid hill upon Ameren is eaſt-northeaſt from you, and ſaile ſo right with it, then you run too neer the forſaid Riff of Silt, the hill is then alſo in two parts, the northermoſt is then the ſmalleſt.

Ameren-Borne.

For to ſaile in at the Red-deepe, or Silter-deepe comming off from Holyland, and that you haue gotten ſight of the land, then bring the north end of Ameren north and by eaſt from you, untill that you be come in betwixt Ameren and the Riffe of Silt, run then in alongſt by the ſtrand of Ameren, untill you come about the north point of Ameren, and ſo long to the eaſtwards, untill that Ameren lye ſouth and ſouthſouthweſt from you. You may not ſaile into this canell further to the eaſtwardes, for then you come againſt the Iland of Vooren, but you may ſaile to the northwards alongſt betwixt Vooren and Silt, till you come before Liſt. In Silter deep is upon the ſhowldeſt three fathom water, being over it, there is againe eight, nine, ten, and twelue fathom. There lye two riffes, or bad ſands, the one about weſtſouthweſt from Ameren drye aboue water, that is, very far flat, to wit, in three, foure, or fiue fathom, it is called of the Iuthes the Borne, or Ameren-Borne, although that it be not faſt to Ameren, for the Red-deep goeth in betwixt them both. It is not alſo faſt unto the Voortraps, or that ſouth end of Silt, although it cometh ſhooting off from it, betwixt them goeth out into ſea a deepe of about a fathom and a half, where the Fiſhermen doe daily goe out thorough for to fiſh, eſpecially thoſe of the Iland Vooren, this is the outermoſt ſand that lyeth on this coaſt. They that uſe this coaſt much, either for Rypen, or the quarters thereabouts are very much afraid for this Ameren-borne when they come off from Holyland, they finde this ſhowld about weſtſouthweſt from Ameren.

The other ſand ſhooteth off from the ſouth end of Ameren, lying about ſouth, and ſouth & by weſt into ſea alongſt the land, that is alſo called by many the Born, or Ameren Born. He that commeth off from Holyland, and is bound to the northwards, need not feare ſo much for the ſhowld, for it ſhooteth out moſt by the land.

The Haven of Liſt.

ABout eight leagues to the northwards of Silter-deepe lyeth the Haven of Liſt, which runneth in by the north end of the Iland Silt. For to ſaile in there comming from the ſouthwards, run ſo long to the northwards in 6 or 7 fathom, that you may ſee a litle Iland without the point (which lyeth within theſe outer Ilands) upon which ſtandeth a houſe called Ieurtmans-houſe: when that houſe commeth a maſt length without the point of Liſt, then go in eaſt & by ſouth, and eaſtſoutheaſt, keep thoſe markes ſo ſtanding, untill that you be within the point of Liſt, edge then up to the ſouthwards about the point, and ancker before the Vochts houſe, there it is 9 and 10 fathom deep. At the entring of the chanell lieth a Plate or ſand called Haef-ſand, that you muſt leaue on the larbord ſide, when you come in, it is on the off-ſide very flat, & good for to ſound when you come from the northward. For to avoid that when you come from the northwards, edge off ſo far from the ſhore that the red cliffe come without the ſandhils, or that you may ſee it plainly: then you may go well over Haef-ſand with a ſhip that is not of a very great draught. Likewiſe when you come out at the chanell of Liſt, & are bound to the northwards, ſaile ſo farre out that you may ſee the cliffe, and then you may goe over the foreſaid ſand, which lyeth from the ſouth end of Rem a good wayes into ſea.

Haef-ſand.

On the ſouth ſide of the chanell of Liſt lye alſo two ſands or banks alongſt the ſhore, not very farre without the ſtrand, the innermoſt or northermoſt is called Barling ſand, and the outermoſt, Ruſt, or Ruſting, that lieth to the ſouthwards almoſt thwart of the red cliffe, betwixt theſe ſands, & the ſtrand of Silt goeth in the Land-deep. For to ſail in there comming from

Barling-ſand Ruſt, or Ruſting.

from the ſouthwards, you muſt ſeek betimes to the ſtrand of Liſt about the red cliffe, becauſe of the Ruſt which lieth off from the northend of Liſt a little without the ſtrand. When that you haue the ſounding of the ſhore, and are come ſomwhat within that red cliff, there ſhal meet you a flat from the ſhore, which you muſt ſomewhat avoid, and then you may ſound it very well: keep all alongſt the foot ſtrand, there you can take no hurt of it. From the Inner point of Liſt ſhooteth off alſo a little riffe, whereof you muſt take heed. When that you are come within the Innermoſt point of Liſt, then you may anker where you pleaſe. If you will goe to Lutke Tonderen, then leaue that ſand (which lieth to the ſouthwards of Iureſand) on the ſtarbord ſide, and runne through betwixt them both. He that is bound to Hoeſem or Silt over the the Wadt, muſt leaue that ſand on the larboard ſide. Vpon Vooren ſtand two or three trees, theſe you muſt keepe over the weſtermoſt church or ſteeple, and run ſo alongſt unto Vooren.

Betwixt the Ruſt and Barling-ſand goeth a faire deep chanell through, called the Newdeepe, right in alongſt to the ſouthwardes of Rook-ſand, that is, a ſhowld which lieth to ſea-wards of Ruſt and Barling-ſand. For to ſaile in at that New-deepe, bring the white cliffe upon Silt eaſt, and eaſt and by north from you, and run in ſo right with it, and you ſhall fall right in the New-deep betwixt theſe two bankes, leaving Rookſand or the Maber on the larboard ſide of you, run in ſo alongſt by Ruſt, but come alſo no neerer to it then in foure fathom, untill that you come into the Land-deep, but comming againſt the ſhoare, and getting ſhowlding of the ſtrand, run in alongſt by the foot-ſtrand on inwardes, as is rehearſed in the deſcription of the Land-deep.

Rockſand.

Betwixt Haef-ſand, or Haes-ſand, and the Iland of Rem, goeth in yet a little Land deep of about a fathom and a halfe water. The Iland Rem is three leagues long, and very flat on the off-ſide, ſo that you ſhal ſcarce ſee that land in ſixe or ſeven fathom.

About eight or nine leagues a ſeaboard of the Iland Silt lieth another banck alongſt the ſhore of eight or nine fathom, and is about two leagues long, about ſo long as the Iland is. Betwixt this banke and the Iland it is thirteen fathom deepe, being in nine fathom a ſeaboard the Iland Silt, then lyeth Holyland about ſouth from you.

Banck of at ſea.

Knuyts-deep, or Ryper-deep.

FRom the channell of Liſt to Knuyts or Ryper-deep the courſe is north & ſouth about ſeven leagues, but Ryper-deepe and Holyland lie north ſomewhat weſterly, and ſouth ſomewhat eaſterly one from the other. For to ſaile into Knuyts or Ryper-deep comming from the ſouthwards, run about by the flat of Rem and Manu towards the ſouth end of Phanu, called Souther-head, or Souther-height, and ſo you ſhall ſee two capes upon a drye ſand, ſomewhat to the ſouthwards of Southerhead; bring thoſe capes a little through one another, to wit, the innermoſt or longeſt a little or a handſpikes length to the northwards of the ſhorteſt or outermoſt, and then they ſhall ſtand eaſtnortheaſt from you, keep them ſo ſtanding, and ſaile right in with them, and ſo you ſhall finde the outermoſt buye, lying on the north ſhoare in foure fathom in the chanell, called Old Ryper-deepe, leaue that buye on the larboard ſide, and then goe inwards eaſt and by north, eaſt, and eaſt and by ſouth unto the ſecond buye, you muſt runne alſo about to the ſouthwards of it, for thwart of it commeth a ſhowld ſhooting off from the north ſhoare, from the outermoſt cape towardes the ſecond buye, which you muſt avoid.

Or keepe the ſounding of the ſouth ſhoare called Coerſand, & run by your lead firſt eaſt and by north, then eaſt, and at laſt eaſt and by ſouth in by it, you ſhall finde there upon the ſhowldeſt not leſſe then ten foot at low water and a common tyde, there within it is again 6, 7 and 8 fathom deepe. Being paſt the capes, then luffe up to the northwards, about the ſand where the capes ſtand upon, and ancker there where you pleaſe, there it is wide and broad, and alſo deep and ſteepe, ſo that there you can take no hurt. The Ryper ſhips that are bound our, doe lye there for to ſtay for a winde. Behind the Iland Manu it is 6 and 7 fathom deepe, there alſo men may ride, from thence you may go up the deep to Rypen, but not up along to Rypen with great ſhips, cloſe to Rypen the deep endeth, ſo that there is a ſhowld neck betwixt both, where there is no more then 6 foot depth. With ſmall ſhips you may alſo ſaile about behind Rem towards Iurſand, there is at low water about 7 foot water.

Coerſand.

Comming from the northwards for to ſail into Ryper-deepe, you ſhall alſo runne on to the ſouth end of Phanu, untill that you ſhall eſpye the foreſayd capes, and doe then further as is aboue taught. This chanell is not the beſt channell in foule weather, for it is narrow

narrow and farre off ſhowld without it: but when you ſhall be entred into it, you may eaſily ſee both ſides break, if it blow any thing hard.

A ſouthſouthweſt & northnortheaſt moon maketh here the higheſt water.

The Grouwe-deepe.

ABout northeaſt, or northeaſt & by north from the north end of Phanu lyeth a little Hill, called Luyſbergh: a little to the northwards of it lyeth a long plaine ſand-hill, Langelegh. called Langelegh: from thence lyeth the land towards Zuyder-zijt weſtnorthweſt, and eaſtſoutheaſt.

Betwixt the north point of Phanu & Langelegh goeth in that Grouwe-deep. For to ſail in there when you come from the ſouthwards, run alongſt the Iland Phanu, and about by the north end of it, (which is farre flat.) When as that you get deeper water, you ſhall ſee three or four hommocks about northeaſt from you, upon the high land with a litle flat ſteeple, called Holm, or Bruynum. Bring that little Church a Cables length to the northwards of the Hommocks, goe in then northeaſt, and keep the ſouth ſhore, until you come within that dry ſand, which ſhooteth off from Smeurſand. Phanu, called Smeurſand, you may run to that upon your ſight without doing amiſſe, but leaue that on the ſtarboard ſide when you come in. The ſhores are thereabouts both of them very ſteepe, as well Wiſdike, (that is the Plate which lieth in the chanell) as alſo Smeurſand, but without the ſhoares are flat. When you are paſt the point of Smeurſand, edge then over to Wiſdike, and ancker there until that you haue the loweſt water, and then you may ſaile to Hartinghen, and go on foot Wardt. to Wardt, or Woert, which lieth eight or nine leagues within the land, the river is very crooked, upon the which here and there lieth a Gentlemans houſe.

A ſouthſouthweſt & northnortheaſt moon maketh there the higheſt water, and there it floweth with a common tide about a fathom up and down.

Schellingkroegh. From Phanu to Schellingkroegh it is four leagues, betwixt them lieth Zuyder-zijt a little river of eight or nine foot water. The land Zuyderzyt. betwixt Langelegh and Zuyder-zijt is ragged land with ſand-hills, and rough, being grown with ſpirie graſſe, or heath. If you ſhould fall with the land at Zuyderzijt, & that you could not lead it into the chanell, then chooſe the land of Langelegh, you may run to it without danger, keepe in two fathom and a halfe, and you cannot ſaile amiſſe of this Kroegh: for you may ſound this land all alongſt in two fathom and an halfe off from Langelegh untill you come within Schellingh-kroegh, but if you run in three fathom, or three fathom and and a halfe, you ſhall ſaile without the drie ſand, and run about a ſeaboard of the forenamed Kroegh. Schellinghkroegh lieth in moſt northweſt, men lie there within, sheltred for all windes, like as men doe lie at Coningſborough in the Kettell. If ſo bee that you come from the northwards, and are bound into this Haven or Kroegh, you may run about by that dry ſand in three fathom, when you come by the innermoſt point of that drie ſand, there ſhooteth off a little taile of ſand, but you may ſee it well, and keepe your ſelfe from it: when yow come to the eaſt end of that ſand, luffe up about it, untill you come into that Kroegh, and ancker there in two fathom and a foot, it is there very wide, you may make there a good board, and turne it in to windwards. A ſouthſouthweſt and northnortheaſt moone maketh there the higheſt water, the farther you come to the northwards to Iutland, the leſſe tide goeth, and the leſſe it floweth up and downe.

At the north end of the foreſaid drie ſand lieth the Doodenbergh, that is a ſhort hom- Dodenbergh. mock of a ſand-hill, which lieth alone, when you are ſomewhat off from it, then it lieth under the other land, that you cannot ſee it, when you come from the ſouthwards or the northwards you may ſee it. From the Dodenbergh unto that ſouthend of the drie ſand, it is all alongſt a faire ſtrand, and flat ground. For to ride under the drie ſand, you may ſound about it, coming from the northwards, and get ſmooth water for a northweſt winde, and alſo for weſterly windes.

Of the tydes, and courſe of the ſtreames.

IN the Pipe, Eyder and Hever, a ſouth and north moone maketh the higheſt water, the floud cometh there out of the northweſt, and the ebbe out of the ſoutheaſt, and ſo run over the north grounds.

In the deep of Liſt or Silt, a ſouth & north moone maketh the higheſt water, the flood commeth there out of the northweſt, and falleth very litle alongſt the land, and the ebbe to the contrarie.

In Knuyts-deep, a ſ.ſ.w. and n.n.e. moon maketh the higheſt water. The flood cometh here alſo out of the northweſt, & falleth but a great quarter tide alongſt the land, and the ebbe to the contrary.

In

In the hauen of Zuyderzijdt, the Grouwe deepe, and Schellingkroegh a ſouthſouthweſt and northnortheaſt Moone maketh the higheſt water, the floud commeth there alſo out of the northweſt, and falleth over the Reefſhorne towardes the Iuttiſh Ilands, and the ebbe againe to the contrarie, off from the land into the North ſea.

Of the grounds and depths.

THe grounds of the Hever & the banckes of the Smalle deepe without Strandt & Eyderſtee, lye at leaſt two leagues without the coaſts of the land.

Betwixt Holy land and Ameren or Strandt it is tenne or eleuen fathome deepe, in that depth you may ſee both the lands, if you clyme up in the ſhroudes. Strandt is to be knowne by the ſteeple of Pielworme, ſtanding upon the ſouth ende of the land: Upon the Iland Strandt ſtand more churches and ſteeples, but none ſo good to be knowne as Pielworme.

Ameren is a league and halfe long, and hath all alongſt low ſandhilles growne with ſpyrie graſſe.

The Iland Silt you may ſee in tenne fathom: Upon this Iland (neareſt to the north ende) lyeth a high ſteep redde cliffe, on both ſides going flooping downe; upon the ſouth ſide of the clif ſtandeth a flat church, with a low ſteeple, and to the eaſtwards of it another church, with a high thick ſteeple called Heydom. The north ende of the Iland is called Liſt, and the ſouth ende Voortrap.

Courſes and diſtances.

FRom the Eyder to the Hever the land lyeth northnorthweſt and ſouthſouthweſt — — 5 leagues.

From the Hever, or the ſouth ende of Strand to the ſouth end of Ameren northnorthweſt aboute — 5 leagues.

Two leagues north from Ameren lyeth Silt, which is aboute fiue leagues long, and lyeth ſouth and by eaſt and north and by weſt.

From the north end of Silt called Liſt unto the ſouth ende of Rim or Rem it is northeaſt and ſouthweſt one greate league, Remme is three leagues long, and lyeth moſt ſouth and north.

From the north ende of Rem to the ſouth ende of Manu it is northeaſt and ſouthweſt, a league and a halfe, you can hardly get ſight of it by reaſon of the groundes, and greate ſhowldes, which lye thwarte of it to ſeawards.

Manu and Phanu lye aboute two leagues one from the other, Manu is almoſt a league long, and Phanu about four leagues long, & lyeth from Phanu Knuytes to Knuytes deepe ſouthſoutheaſt and northnorthweſt. This Iland hath alſo a fair ſtrand, but the north end towards Grouwe deepe is verie flat.

From Phanu to the Dodenberg it is about four leagues, betwixt them lye the hauens of the Grouwe deepe and Schellingkroegh.

From Holy land to the Eyder eaſt & by north, and weſt and by ſouth — 7 leagues.

From Holy land to the outermoſt buye in the Hever northeaſt and ſouthweſt 8 leagues.

You may lye by the outermoſt buye in the Hever, and ſee Holy land with cleare ſight.

From Holy land to Ameren or Smalle deepe northnortheaſt ſomewhat eaſterly, & ſouthſouthweſt ſomewhat weſterly 10 leagues.

From Holy land to the deepe of Silte or Liſt north and by eaſt — 19 leagues.

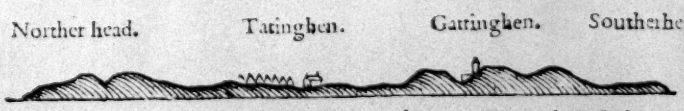
From Holy land to Knuytſdeep or Ryper deep north and north and by eaſt 25 leagues.

From Holy land to the Horne or the Dodenbergh north and ſouth — 32 leagues.

From Knuytesdeepe or the Iland Phanu to the Flye ſouthweſt and by ſouth — 50 leagues.

From the Iland Silt to the Flye northeaſt and ſouthweſt — 46 leagues.

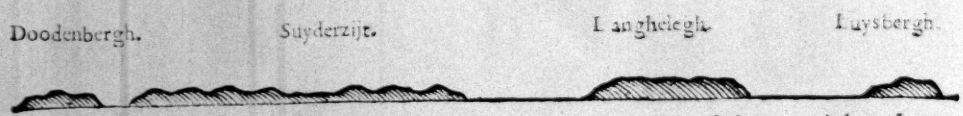
Howe theſe foreſaid lands doe ſhewe themſelues at ſea.



Thus ſheweth the land of Eyderſtee to the northwards of the Eyder.

Thus ſheweth the Iland Ameren.

Thus ſheweth it ſelf the Iland Silt, when you ſaile alongſt by it.



Thus ſheweth the land of Zuyderzijt to the ſouthwards of the Doodebergh.

CHAP. VI.

The Coaſte of Iutland from the Horne to the Scawve or Schagen.

ALitle to the northwardes of the Dodenbergh lyeth the pointe called the Horne betwixt Zuyderzijt and Weſterzijt making there a Horn of the land: to the ſouthwards of it the Coaſt lyeth eaſtſoutheaſt and weſtnorthweſt towardes the Grouwe deepe: to the northwards of it north, and ſouth towardes Weſterzijdt. Weſterzijdt is a village lying betwixt the Blauwenbergh & the Horne.

About this pointe or Horne runneth off a long banck aboute twelue leagues weſtſouthweſt into ſea, called Reefſhorne, or as ſome do name it Devillſhorne, which lyeth at ſome places altogether drye, eſpecially ſeuen or eighte leagues from the ſhoare, where it is not deeper then two fathome and an halfe, or three fathom a foote leſſe. A ſhippe that ſayleth upon it, men can but euen ſee it from the land, it is at the deepeſt by the land, to weete, four fathome lacking a foot, He that commeth there from the northwards with a ſhip of great draught, muſt take verie good heede, for it is upon the northweſt ſide ſo ſteepe, that men ſhall haue one caſte two and twentie, the next caſt fifteene, and the third caſt no more then three fathome. Reefſhorne.

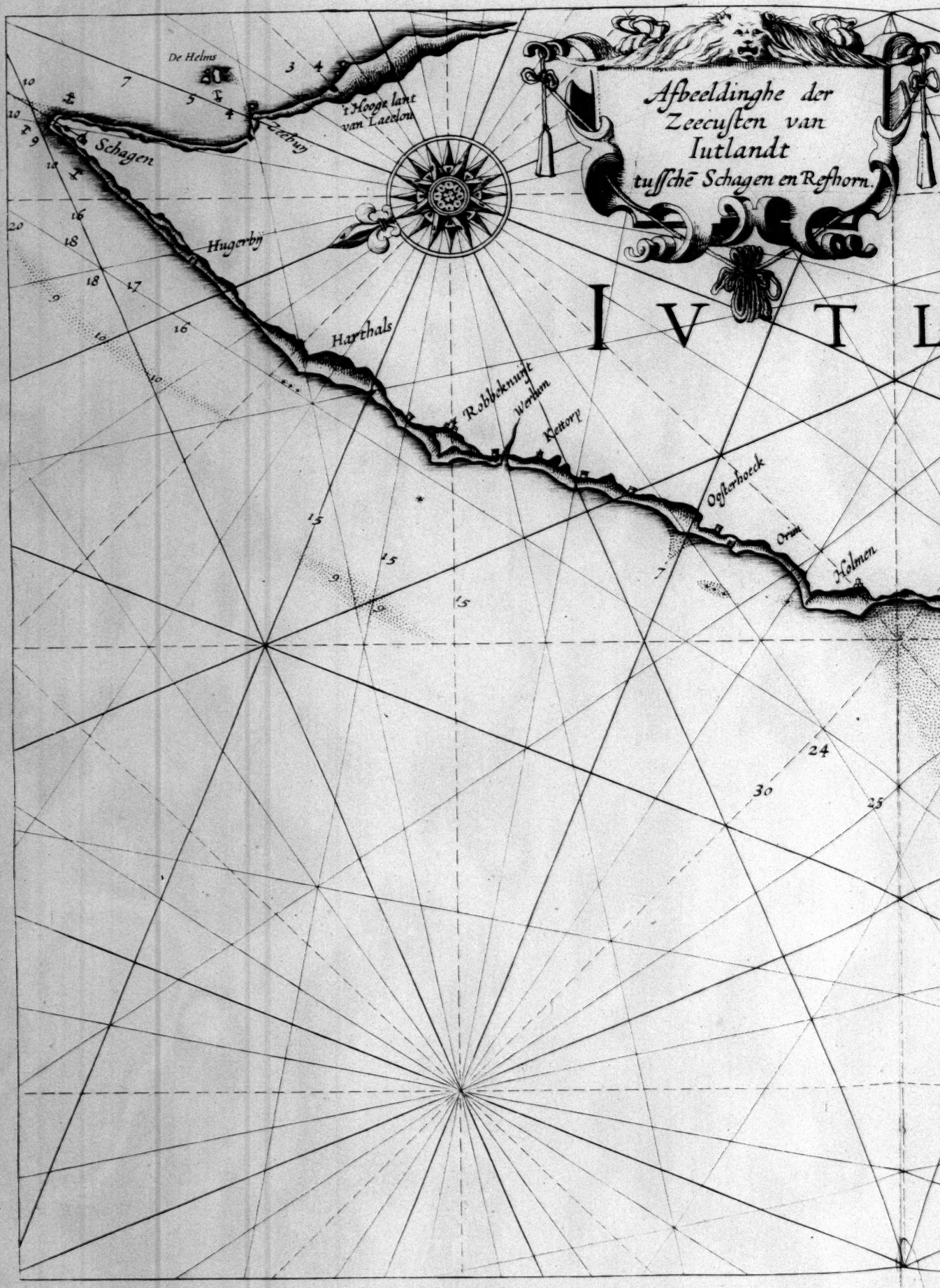
When you fall with the land with Weſterzydt, or to the northwards of Reefſhorne, you may ſound alongſt by the ſhoar in ſixe or ſeuen fathome, untill you come neare the foreſaide Horne: you ſhal then alſo finde another ſhowld Riffe, that runneth off from the land, called the Owle, which is alſo verie ſteepe on the north ſide: from the northwards you may not come nearer it, then in ſeuen fathome. A litle to the ſouthwardes of it, beginneth Reefſhorne to runne off from the ſhoare, it is there a narrowe banck, you ſhall not finde there leſſe then three fathome, or three fathome lacking a foot water, at two or three caſts, according as it ſhall blowe hard or ſoft, and that you ſhall make your waie, and then you ſhall gette preſently againe fiue fathome, and ſound it about by that ſhowlde ſand, whether you deſire to be. The Owl.

According to the opinion of ſome, Doggers Sand beginneth from this banck. When men ſette ſaile earlie in the morning out of Rinkoppers deepe, with a ſouthweſt waie, and a good northeaſt winde, then they are aboute four of the clock in the afternoone yet in nyne fathome: whereby it ſhould appeare, that Doggers ſand ſhould haue his beginning at this banck.

For to knowe the land hereaboutes: Aboute four leagues to the northwardes of the foreſaid Horne lyeth a high hill a little from the ſtrande, called the Blawenbergh, going plain downe on both ſides: which is ſomewhat blacker then the other land, being grown with ſpyrie graſſe, to the ſouthwards of this Blawebergh lieth that fiſhers village Weſterzydt: betwixt that village and the Horne lyeth one black hommock, and alſo a Gentlemans houſe, otherwiſe the land is altogether full of hommocks.

Rinkopper Deepe.

TO the northwards of the foreſaid Blawenbergh lye three or four lowe white Sandhilles,


Afbeeldinghe der
Zeecusten van
Iutlandt
tusschē Schagen en Refhorn.
I V T L
De Helms
't Hooge lant
van Laeslon
Zeethuys
Schagen
Hugerbij
Harthals
Robbeknuist
Werthum
Ketorp
Oosterhoeck
Orum
Holmen
3
4
5
7
10
15
16
17
18
20
24
25
30

Duytſche mijlen 15 voor een graad

1 2 3 4 5 6 7 8 9 10

Engelſche en Franſche mijlen 20 in een graad

1 2 3 4 5 6 7 8 9 10 11 12 13 14

L A N D T

Schellickroogh
De Horn
Weſterſydt
Blaauwe bergh
Rinsper diep
Hoogheuvy
Namet
Rinsopen
Swartsburgh
Gladde Loop
't Landt van Numit
Treksmund
Boerenbergen
Timmelbuy
weſterijl
Dren wpl
Rif
Sutſchip

5 6 10 12 14 16 18 18 20 20

Rinke
deepe

Glad

hilles, and by the hauen of Numen alſo two great white Sandhilles cloſe one by the other. To the northwardes of theſe Sandhilles runneth in that hauen of Numen, the land lieth betwixt the Hauen of Numen and the Doodenbergh, moſt ſouth & north about ſeuen leagues, all alongſt a faire ſtrand: the beſt to be knowne of this coaſt, is the foreſaid Blawebergh, and thoſe two foreſaid white Sandhilles.

Rinkopper deepe. For to ſaile into Rinkopperdeep or the hauen of Numen, runne alongſt by the land of Weſter-zijt, in ſixe or ſeuen fathome, untill that you come to the two foreſaid great white Sandhilles, and then you ſhall ſee upon a lowe land two capes, upon each of them ſtandeth a barrell: Bringe them one in the other, and then they ſhall ſtand north, or north and by eaſt from you, ſaile in right with them, and you ſhall finde a buye, except it be laide ſomewhere els. Right before the hauen of Numen lieth a Sand-
Gladde Iaep. plate, named Gladde Iaep. For to ſaile into the ſouther channel, then leaue that plate on the larboard ſide, & run in cloſe by the ſouth ſhoare or foot ſtrand (where the aforeſaid white Sandhilles doe lye upon) right with the Capes, and there you cannot doe amiſſe, but runne in boldly by it upon your lead, that is the verie ſureſt waie of all to ſail in alongſt by the ſtrand, when men are carefull of the lead.

Being paſt Gladde-Iaep, runne then towards the north ſhoare, you may ſaile aboute by it ſo cloſe as you will, it is a lowe plaine pointe, altogether cleane and verie ſteepe. When you are come within this point, you may ancker where you pleaſe. This channell lyeth in moſt north and north and by eaſt, untill you come within Gladde Iaep, and then ſomewhat more eaſterlie towards the foreſaid point. In this channel goeth an indifferent ſtrong tyde, becauſe there lyeth ſuch a great Sound within. It floweth there little up and downe, no more then two foot and a halfe, with a common tyde. A ſouthweſt and northeaſt Moone maketh there the higheſt water. Right to the northwardes of Gladde Iaep runneth in another channell, but there is no more but eight foot water.

Further within the Hauen of Numen it is Pilots water, but ſhippes that are not of greate draught may well ſaile up, eſpecially at a lowe water. The deepe runneth alongſt by the ſtrand of Numits, keeping alongſt by it you can not doe amiſſe: ſo ſoone as you goe off from it, you ſhall be in daunger to ſaile within the ſhares or tayles, which lye off from the Wadt towardes the land of Numit, therefore runne cloſe alongſt by the aforeſaid ſtrand of Numit, ſo long, untill that a little church with a flatte ſteeple (about eaſt from you, againſt the high land of the Holme) come to the ſouth ſide of the high land: then you are within the tayles and ſands that lye out, leaue then the ſtrande, and goe in northnortheaſt, and northeaſt and by north, untill that a rounde hommock come cloſe to the ſouthwardes, or right over a little blew church upon the high land of the Holme. Goe then in alongſt northeaſt and by eaſt, untill that the foreſaide little blewe Church commeth over a Gentlemans houſe, beneath in the lowe land, cloſe to the water. Sayle then on north, and by litle and little north and by eaſt, untill you come before Rinkoppen, it is there broade, large and wide, and the right deepe two fathome and two foote.

Rinkoppen and the Hauens mouth of Numen lye foure leagues aſunder, one from the other.

To the northwardes of Rinkoppen goeth a little river into the land, upon which lye two little townes, ſeuen or eight leagues in the land, the one named Hoſtebro and the other Huyſbuy.

A halfe league to the ſouthwards of Boeven- Troſmont.
berghen goeth in yet another little hauen inwardes out of the ſea, named Troſmondt, there ſtand two maſtes, you muſt keepe them one in the other, and runne ſo in to it: there lyeth a little village within called Troſmonde. From thence you may ſayle over the Wadt to Rinkoppen.

This little hauen is not to be reckoned for a Hauen, becauſe ſometimes it is caſt too, and ſometimes there may goe in and out againe Boates or Crayers and ſmall ſhippes.

From Rinkopper Deepe, or the Hauen of Numen to Boevenberghen the land lyeth moſt north and ſouth tenne leagues, there is all alongſt betwixt them both a faire ſtrand, with white ſandhilles, growne with ſpyrie graſſe. When you ſaile alongſt by it, you may ſee the blewe double land of Rinkoppen, (called the Holmes) alongſt over this land.

Betvvixt Boevenberghen and the Reef horne lye ſome banckes of ſeuen, eight and nyne fathome, and alſo ſome that are deeper.

Boevenbergh is a long ſmooth hill, having in Boevenber-
the middeſt a high round hommock or hill, and ghen.
upon that hill ſtandeth a church with a ſteeple: when you come thwart to land with Bovenberghen, it ſheweth it ſelfe in three hilles, the middlemoſt is the higheſt, upon vvhich ſtandeth the foreſaid church, with a flat ſteeple: upon both ſides of that hill ſtand alſo other churches, but they are not ſo high: you may ſee the land in thirteene and fourteene fathome, the ground is groſſe red ſand with ſome litle ſtones therein.

When Bovenberghen is eaſtnortheaſt from you, it ſheweth it ſelf in a long hill, with ſome dale in the middeſt on the north ſide, with a

church, and alſo a church on the ſouth ſide, & alſo another hill to the northwards of it.

From Boevenbergen to the Holmes the land lyeth northnortheaſt nine or tenne leagues, betwixt them it falleth in with a Bight, it is black land with Hommocks, and ſandhilles growen with ſpyrie graſſe, here and there ſtandeth a flat ſteeple in the land.

Aboute fiue leagues from land lieth a bancke of tenne fathome, but it laſteth not long before you get againe deeper water.

The Riffe. Betwixt Boevenberghen and the Holmes lyeth the great Iuttiſh Riffe weſt off into ſea, running over it in twelue or thirteene fathome, then lyeth the Naze from you, northweſt & by north 24 leagues, running over it in ſeuenteen or eighteene fathome, you may ſee the land; on the north ſide it is groſſe ſand, on the ſouth ſide ſtonie like as peaſe and beanes.

Weſtnorthweſt from Boevenberghen about eight leagues it is ſixteene fathome deep, groſſe ſtonie ſand ground: ten leagues from the land it is twentie fathome deep groſſe ſtonie ſand, like to peaſe.

Southweſt and by weſt from Boevenbergen about nine and twentie leagues, it is 25 fathom deep, redde and black ſand ground, that is the ground of Doggers ſand.

Holmes. The Holmes is a plain pointe, going downe ſteepe on the northeaſt ſide, upon the middeſt of the hill ſtandeth a ſquare church without a ſteeple. When that higheſt of the land is ſouthſoutheaſt from you, and that you can but euen ſee the north ende of it, then it is fifteen fathom deepe, groſſe rough ſand, with ſome litle ſtones amongſt it.

Two leagues northeaſt, or as ſome ſay, ſomewhat more eaſterlye, off from the north pointe of the Holmes: to wete, betwixte the north pointe and the Holmes, and the eaſter pointe, lyeth a ſtonebanck (in manner as the Trindle of Leſolde) upon which there is no more then twelue foot water, ſo that there remaineth about two third partes of the water betwixt that Stonebanck and the north point, and the other third parte betwixt the Eaſter pointe and the aforeſaid Stonebanck: there haue divers ſhippes beene loſt upon it. The foreſaid Eaſter pointe lyeth about four leagues to the eaſtwards of the Holmes, and is alſo a high ſteepe point, as if it were the Holmes. Right thwart of this eaſter pointe ſhooteth off a riffe almoſt a league off into ſea, which you may ſound about in ſeuen fathome. Some ſay, that men may ſail through betwixt that riffe and the land.

From the Holmes to Robſnot or Robbeknuyt the courſe is northeaſt nine leagues. A litle to the weſtwards of Robſnot in the bight towards the eaſter pointe, neareſt to Robſnot ſtand fiue churches with flat ſteeples. There lye alſo two blewe lands betwixt the Eaſter pointe and Robſnot, in the bight, you may ſee alſo a cloven hill or ſandhil before you come to Robſnot. It is there all alongſt a flat ſtrand. To the Eaſtwardes of the Holmes goeth in a litle river called Miſdorp. A litle to the weſtwards of that white cliffe of Robſnot goeth in alſo a little River, whereupon lyeth a litle towne called Werlom.

Robſnot. Robſnot or Robbeknuyt is a high round hil, upon the toppe whereof ſtandeth a church with a ſharpe ſteeple. The land falleth avvaie to the eaſtvvards from this point, with a great bight towards Hartſhals. Thwart of Robſnot it is farre off flatte, fifteene fathome depth is almoſt three leagues from the ſhore. There alſo thwarte of Robſnot about four leagues from the ſhore lyeth a banck of nine fathome, lying alongſt the ſhore. Thwarte of Robſnot lyeth alſo a rock about a league from the land.

Hartſhals. From Robſnot to Hartſhals it is northeaſt & by eaſt four leagues, there ſtandeth a flat ſteeple betvvixt both, neareſt to Robſnot, there you may ſee the high land of Lackley, alongſt over that high land.

Hartſhals is a long ſmooth hil, which is at the eaſt ende ſomewhat ſteep. Thwart of Hartſhals lyeth a ſhowlde or ſtony ground, about an Engliſh mile from the ſhoare, upon which (as men ſaye) there haue beene ſhippes loſt, but men doe ſeldome come neare it.

She Scawe. From Hartſhals to the Scawe or Schagen the courſe is eaſtnortheaſt eight leagues. The land to the eaſtwards of Hartshals is altogether full of hommocks and ſandhilles, you may ſee the high land of Lackley alſo alongſt over this land. Alongſt theſe coaſtes men finde none ſuch long plaine hilles, as are Boevenbergen, the Holmes, Hartſhals and Robſnot. Somewhat within the point of the Scawe ſtandeth a flat church with a flat ſteeple, called Old Schaghen, vvhen that is ſouthſoutheaſt from you, then there runeth off from the ſhoare, a litle ſpitte or ſhovvld, there you muſt edge ſomevvhat off from the ſhoare, otherwiſe it is all alongſt a ſteep ſtrand betvvixt Hartſhals and the Scawe, but you may ſounde aboute this litle ſand in four and fiue fathome, ſo neare as you will.

Upon the eaſt ende or outermoſt pointe of the Scavve ſtandeth a firebeakon, like a Cape to ſee to: when the church is ſouthvveſt and by vveſt from you, then are the firebeacon and the ſteeple one in the other, and then you are right thwart of the riffe of the Scawe, which lyeth off from the point eaſtnortheaſt, and eaſt and by north almoſt a league into ſea.

He that commeth from the weſtwards, and will ſaile alongſt by the land, aboute the Riffe, muſt

muſt eſpecially be verie careful in uſing the lead, he may take the ſounding of the ſhore ſo neare as he will, according as the winde ſhall be, in eight, ſeuen, ſix, fiue, four, and alſo well in three fathome, without doing amiſſe, he neede not to feare: If he be but carefull in uſing his lead, with a ſouthweſt winde, he may ſail about it in three or four fathome. When the Firebeacon commeth to the eaſt ſide of the houſes of the Scawe, then you come againſt the weſt ſide of the Rif, when the Firebeacon and the church are one in the other, then you are on the eaſt ſide of the Riffe. When the Firebeacon commeth about halfe waies the houſes, neareſt the weſt ſide, then you are right upon the pointe of the Riffe, what depth that you haue then you ſhall keep it ſtill, without finding it ſhowlder, whether you ſaile alongſt ſoutheaſt or northweſt.

He that commeth from the ſouthwards, and is bound about the Scaw to the weſtwards may not ſound the Riffe, becauſe the ſouth ſide of it is ſteepe and needle to, it is not good to come nearer to it then in twelue, thirteen, or fourteen fathome, eſpecially by night or darke wether.

Marks of the Scawe riffe.

For to knowe by certaine markes, when you are cleare of this Riffe, as well over the one ſide as the other, then marke, comming from the weſtwards, when the old Church and the Firebeacon are one in the other, then you come upon the weſt ſide of the Riffe: comming from the ſouthwardes or the eaſtwardes, when the Old Church commeth in the ſouth ende of the village, then you come upon the ſouth ſide of the Riffe. When the ſteeple and firebeacon are ſouthweſt and by weſt from you, then they are one in the other, & then you are thwart of that Riffe. When the ſteeple is ſouthweſt, & ſouthweſt and by ſouth from you, then you are without, or to the weſtwardes of that Riffe: when the ſteeple or firebeacon is weſtſouthweſt and weſt and by ſouth from you, then you are within the Riffe. This you may ſet by night, by the compaſſe, and ſo may perceiue, whether you be within or without that riffe, when the Firemaker doth fire well. You may ancker on both ſides of the Riffe in ſeuen or eight fathome, and haue roome enough to ſet ſaile. Some alſo ſay, that men may runne through betwixt the riffe and the land (If neede require) in two fathome and a halfe.

Tydes out of the Belt.

Betwixt the Scawe and Maelſtrand or Norwaie it is all ſoft ground, the nearer to Norwaie the deeper water. When men come out of the Sound, and are in the farewaie, and can gette no ground in eighteen, twentie, and two & twentie fathome, that is a ſigne that they are aboute the riffe of the Scawe.

When you come about the Scawe from the weſtvvardes, and are bound to the Sound or the Belt, you muſt take an eſpeciall care of the ryde, that commeth out of the Belt, which falleth commonly out of the Belt tovvardes Norwaie, eſpecially when the vvinde hath blovvn a vvhile eaſt or northeaſt, it can carrie a ſhippe by night or darke wether under Norwaie, before you ſhould thinke of it. It did happen in the yeare 1605, the three and twentieth of May, that a ſhippe coming thwart of the riffe of the Scawe, ſo that the riffe did lye ſouthvveſt from her, did driue vvith calmes in eight houres, untill ſhee came vvithin three leagues neare to the land of Northeaſt, about Harmenſhooft, fiue leagues to the weſtwards of Malſtrand, ſo great and ſtrong current there did ſhoote alongſt by the riffe tovvards the northeaſt, although it doth ſeldome happen, that the tyde doth run there ſo ſtrong out, yet nevertheleſſe it behooveth men to be verie carefull, to conſider thereof, and to reckon thereupon.

Courſes and diſtances.

From the Doodenbergh or the Horne to the hauen of Numen or Rinkopper deepe north and by weſt 7 or 8 leagues

From Rinkopper deep or the hauen of Numen to Boevenberghen north and by vveſt about — — 10 leagues

From the Dodebergh to Boevenbergen the land of Iutland lyeth north & by vveſt and ſouth and by eaſt — 17 or 18 leagues.

From Boevenberghen to the Holmes northnortheaſt — — 9 leagues.

From the Holmes to Robſnot or Robbek nuyt northeaſt — — 9 leagues.

From Robſnot to Hartſhals northeaſt and by eaſt — — 4 leagues.

From Hartſhals to the Scawe or Schaghen eaſtnortheaſt — 8 leagues.

From Rinkopper or Numer deepe to the Flye ſouthſouthweſt, or a little more weſterlye aboute — — 58 leagues.

From Boevenberghen alongſt Iutland without the grounds unto the Elue or the outermoſt buye ſouth and by eaſt about 50 leagues.

From Boevenberghen to Holy land, ſouth and by eaſt ſomewhat ſoutherly about 45 leagues.

From Boevenberghen to the Flye or Borneriffe ſouthſouthvveſt about — 69 leagues

From Boevenberghen to the North Foreland ſouthvveſt and by ſouth 118 or 120 leagues.

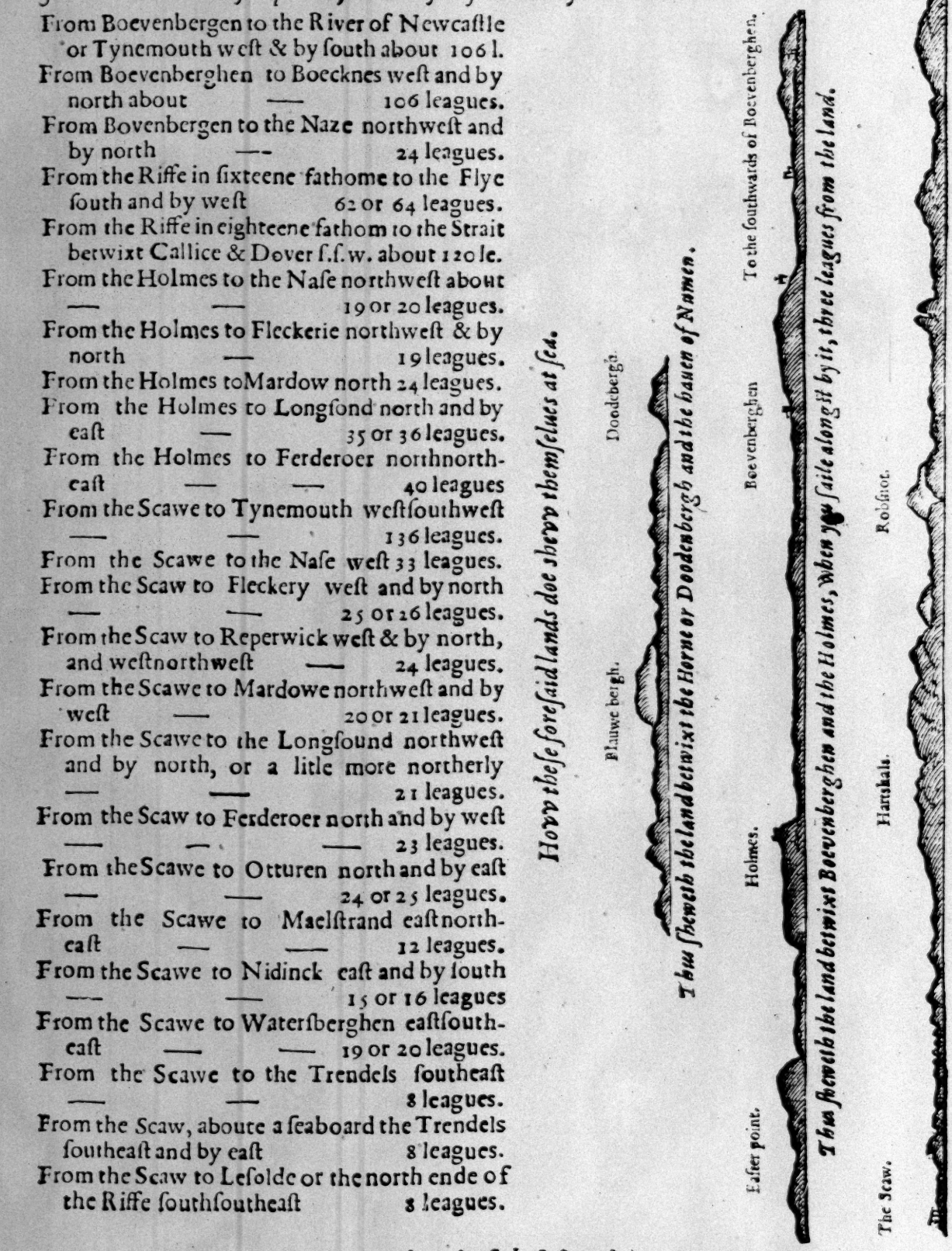
From Bovenbergen to the Holmes before Yarmouth ſouthvveſt — 93 leagues.

From Boevenberghen to Flambrough Head vveſtſouthvveſt — 100 leagues.

From Boevenbergen to Scharbrough vveſtſouthvveſt, ſomevvhat vveſterly 100 leagues.

From Boevenbergen to the River of Newcastle or Tynemouth west & by south about 106 l.
From Boevenberghen to Boecknes west and by north about — 106 leagues.
From Bovenbergen to the Naze northwest and by north — 24 leagues.
From the Riffe in sixteene fathome to the Flye south and by west 62 or 64 leagues.
From the Riffe in eighteene fathom to the Strait betwixt Callice & Dover s.s.w. about 120 le.
From the Holmes to the Nase northwest about — — 19 or 20 leagues.
From the Holmes to Fleckerie northwest & by north — 19 leagues.
From the Holmes toMardow north 24 leagues.
From the Holmes to Longsond north and by east — 35 or 36 leagues.
From the Holmes to Ferderoer northnorth-east — — 40 leagues
From the Scawe to Tynemouth westsouthwest — — 136 leagues.
From the Scawe to the Nase west 33 leagues.
From the Scaw to Fleckery west and by north — — 25 or 26 leagues.
From the Scaw to Reperwick west & by north, and westnorthwest — 24 leagues.
From the Scawe to Mardowe northwest and by west — 20 or 21 leagues.
From the Scawe to the Longsound northwest and by north, or a litle more northerly — — 21 leagues.
From the Scaw to Ferderoer north and by west — — — 23 leagues.
From the Scawe to Otturen north and by east — — 24 or 25 leagues.
From the Scawe to Maelstrand eastnorth-east — — 12 leagues.
From the Scawe to Nidinck east and by south — — 15 or 16 leagues
From the Scawe to Watersberghen eastsouth-east — — 19 or 20 leagues.
From the Scawe to the Trendels southeast — — 8 leagues.
From the Scaw, aboute a seaboard the Trendels southeast and by east 8 leagues.
From the Scaw to Lesolde or the north ende of the Riffe southsoutheast 8 leagues.

How the foresaid lands doe shew themselues at sea.



Thus sheweth the land betwixt the Horne or Doodenbergh and the haven of Namen.

Thus sheweth the land betwixt Boevenbergen and the Holmes, when you saile alongst by it, three leagues from the land.

Thus sheweth the land betwixt the Holmes and the Scaw, when you saile alongst by it.

The ende of the first Booke.

To the Bookbinder.

Place the Cardes thus.

Numb.	1, 2, 3, 4,	before fol.	1.
	5, —	—	5.
	6, —	—	9.
	7, —	—	15.
	8, —	—	21.
	9, —	—	26.

The ſecond parts

SECOND BOOK

of the

SEA-MIRROVR

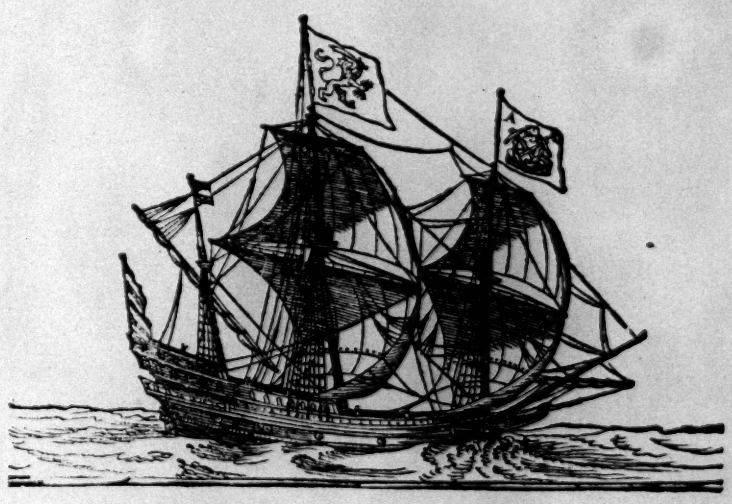
of the Eaſterne and Northerne

NAVIGATION.

Containing

THE DESCRIPTION OF THE Seacoaſts of Norway, Denmarke, Holſt and Mekelenburgh,

From Der Neus and Schagen unto
Bornholm and Statyn in Pomeren.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng en Fr. mylen 20 in een graedt

Passaarte vande Cuysten van Noorwegen Denemarcken Holsten Mekelenborg en Pomeren van Der Naus en Schagen tot voorby Bordholm

SWEDEN.

NOORWEGEN.

t Landt van Noordtoosten.

HALAND

IVTLANT

Anstoo

Stavanger

Lyngaer

Skyphul

Stavanger

Dragens

Zundzwyn-Kholm

Dystelbergh

Langesbergh

Kerckholm

Waerbergen

Walkenburgh

Anout

Lesou

Schagen

Laelou

Zeehuys

Marthals

Robbeknunt

Aelborgh

Marncker

Steenbrugge

Skelnut

Kal

Aerhuysen

Horsens

Holmen

Boevenbergen

Aker sondt

Susters

Coperwyck

Laerwyck

Lanssont

Coninxhaven

Oxfoort

Maerdou

Olde Hilsont

Wolfsondt

Reperwyck

Otterfnes

Vlecker

Heidegrondt

Westerrysen

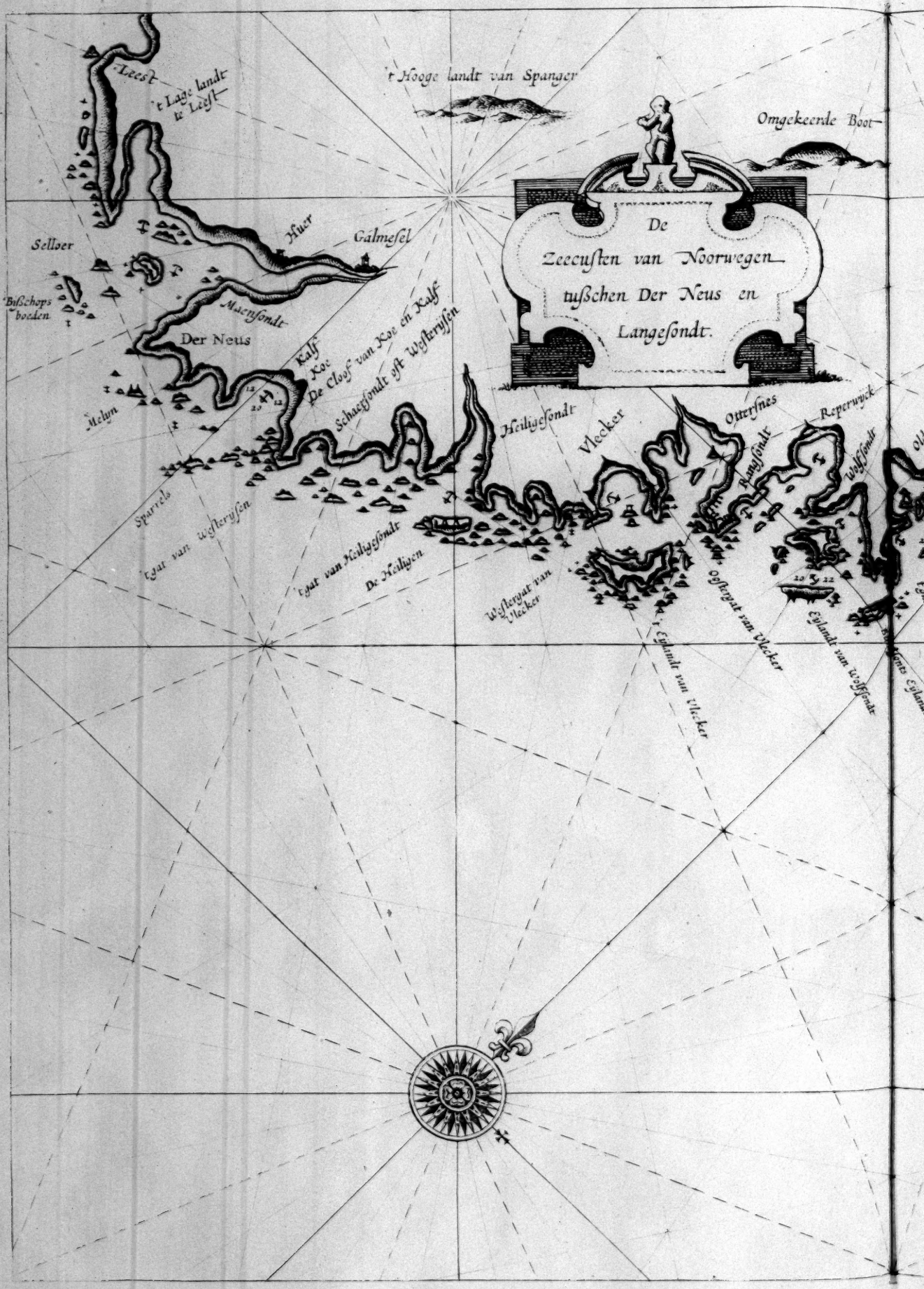
Oosterrysen

EDEN.

LANDT.

Calmar
Oelandt
Berkerhaven
Chriſtianopolis
Groen eylandt
Stuboon
Rottenburn
I. Malqueyen
Elcholm
Selſhorgh
I. Hannen
Ahuns
Somerhave
Santhamer
Goesbaer
Schoonen
Witſee
Landſkroon
Elſenborgh
Kol
ween
Southolm
Elſenaur
Copenhagen
Roſkildefioerd
Iſenfioerd
Kunck
Werdenburgh
ZEELANT.
Roſnes
Kallenborgh
Caſpeur
Schelfaer
Ramps
Langelandt
Funen
Aſborgh
Swynborgh
Wiborgh
Ar
Hilbaer
Hilbaer ſondt
Maddersleu
Alſen
Apenrade
Flensborgh
Kiel
Eckernfoort
Sleeſwyck
Viabel
I. Femeren
Reefkol
Ter Stolp
Garſhooft
Rumolde
Coſtin
Kolbergen
Borcholm
Camin
Stettijn
POMEREN
t Swin
Friſche Haff
Gripswald
Rugen
Wittouw
Poornbos
Meſondt
De Lelle
Barts
Rebbenes
Mekelen
borgh.
Roſtock
Wiſmer
Great Crunſoort
Clein Crunſoort
Lubeck
HOLSTEN.

12


Leest
't Lage landt te Leest
't Hooge landt van Spanger
Omgekeerde Boot
De Zeecusten van Noorwegen tusschen Der Neus en Langesondt.
Sellaer
Huer
Galmesel
Bußchops boeden
Maensondt
Der Neus
Kalf
Koe
De Cloof van Koe en Kalf
Schaersondt oft Westeryssen
Melum
Heiligesondt
Vlecker
Ottersnes
Reperwyck
Ringsondt
Wolfsondt
Sparviels
't gat van Westeryssen
't gat van Heiligesondt
De Heiligen
Westergat van Vlecker
Oostergat van Vlecker
't Eylandt van Vlecker
't Eylandt van Wolfsondt

'Drommels

'Bergh benoorden de 'Drommels

1 2 3 4 5 6 7
'Duytsche mylen 15 in een Graadt
1 2 3 4 5 6 7 8
Spaansche mylen 17½ in een Graadt
1 2 3 4 5 6 7 8 9
Eng. en Franſ. mylen 20 in een Graadt

Olde Hilſondt
Kerſondt
Hamerſondt
Hoſtes
Maerdou
De Vas van Maerdou
Het Eylandt from
Fromſondt
From
Oxefoort
Santvoort
Longen
Weſtkiel
Oſtkiel
Abbefoort
Cominxhaven
Cominx Eylandt
De Baers
't gat van Olde Hilſondt
't gat van Hamerſondt
Eylandt van Hoſtes
Mieu holmen
Weſtergat
't Eylandt van Maerdou
Oſtergat
't gat van Oxefoort
't gat van Longen
't gat van Weſtkiel
't gat van Oſtkiel
Leſſer landt
't gat van Cominx Eylandt
Hortes Eylandt

JJ

THE SECOND BOOK

of the

EASTERNE AND NORTHERN NAVIGATION.

Conteyning the Deſcription of the Coaſts of Norvvaie, Denmarck, Holſten, and Mechelenburgh, from the Naze and the Scawe eaſtwardes, aboute Falſterborne to Brontholme and Statyn.

CHAPT. I.

Of the Coaſt of Norvvaie betvvixt the Naze and the Long ſound.

FRom the Naze (that is the ſouthermoſt pointe of Norwaie on the north ſea) weſtwards, the coaſt lyeth ſomewhat alongſt by the land of Leeſt, weſtnorthweſt; but to the eaſtwardes of it (alongſt without the rockes, untill paſt the Iland Fleckerie) eaſtnortheaſt aboute tenne leagues. From thence alongſt northeaſt unto the Longſound about ſixteen leagues. This coaſt is all alongſt of high ſteepe ſtonie hilles, and without it full of manie rockes verie ſtrange to behold, but it hath manie faire deepe hauens, vvith verie good ancker ground, where is great abundance of timber and boards laden. The firſt Hauen to the eaſtwardes of the Naze, is called the Kloof, or the Cowe and Calfe, after two high hommockes good to be knowne, the one ſomewhat greater then the other, which lye vvithin the Hauen upon the high land, and are ſo called by the Dutch Schippers. He that vvill ſaile into this Hauen comming from the weſtwardes, ſhal meete with a greate rock ſomewhat to the eaſtwardes of the Naze, called Melyn, whereupon is a Warder, being paſt that he ſhall finde another outrock, whereupon ſtandeth alſo a Warder, called Sparrels. Betwixte theſe tvvo outrockes, he muſt runne into this hauen the Kloof. When he commeth againſt Sparrels, there lyeth a ſuncken rock under water whereof he muſt take heede. Somevvhat vvithin Sparrels lyeth another Rock in the faire vvaie, but aboue vvater, vvhich he muſt leaue on the larboard ſide. In ſayling in ſo, the hauen doth open it ſelf, by little and little, and ſo ſhall come againſt the Kloof: being come within it, he muſt edge up to the weſtwardes, aboute the pointe, and ancker there in a ſand baye, in fifteen or ſixteene fathome, ſo that the two foreſaide hommocks, the Covve and the Calfe ſtande about northeaſt from him.

The Kloof. Cow and Calfe.

Melyn.

Sparrels.

A little to the eaſtvvards of Sparrels lyeth a hauen called Scarſound, or Weſtryſen, for to ſaile in there, you muſt leaue Sparrels to the weſtwards on the larboard ſide, and al the great Holmes or rockes to the eaſtvvardes on the ſtarboard ſide, and runne ſo invvardes, untill you come into the hauen. Scarſound.

Four leagues to the Eaſtvvards of Scarſound, lyeth the Iland Holyſound, whereupon ſtande tvvo greate Warders, you muſt ſaile in to the vveſtvvards of the Iland, untill that you be vvithin it, and ancker under the aforeſaid Iland. Thvvart of it runneth in a great Sound, into the land, vvhere you may ſaile in, and vvhere manie ſhippes lade. Holyſound.

About three leagues eaſtnortheaſt from Holyſound, and eight leagues to the eaſtvvardes of the Naze, lyeth the hauen and Iland Fleckerye, you may ſayle in at both ſides of the Iland, as vvell from the vveſtvvardes, as from the eaſtvvards into the hauen of Fleckerie. The vveſter-gat lyeth in northnortheaſt. When you come off from Holyſound, then you ſee open into the Sound, you muſt ſaile alongſt by the rockes vvithout Holyſound, untill you come vvithin the Iland Fleckerie, and edge then vveſtvvard tovvards the land, until you come vvithin the Dieueholme, vvhere the gallovves ſtandeth upon, and ancker by the vveſt land, in fifteene, ſixteene, or tvventie fathome: you muſt bring out there an ancker a head, and make a cable faſt on the rocks upon the land. You may runne Fleckerie. The weſter-gat of Fleckerie.

from

from thence to the eaſtwardes of the Iland Fleckerie, out againe at the Eaſter gatte eaſtnorth-eaſt into ſea, and then you muſt leaue the little Iland with the Warders, which lyeth at the eaſt ende of the Iland Fleckerie, with all the greate rockes by it on the ſtarboard ſide, and all the black holmes on the larboarde ſide.

The Eaſtergatte of Fleckerie goeth in weſt-northweſt, betwixt the Iland Fleckerie and the pointe of Ranſound. When you come before it, you may ſee open into the Voſſe. For to ſaile in there, you muſt leaue all the black rocks thwarte of the pointe of Ranſound on the ſtarboard ſide, and the greate graye rockes with the litle Iland, where the Warders ſtand upon, on the larboard ſide: when as you come then by the forenamed Dievenholme, you muſt runne to the weſtwardes of it into the Sandbaye, and ancker there, as is before ſaid.

The Eaſter-gatte.

When you are thwart of the Eaſter gatte of Fleckerie, then there lyeth right thwarte from you within the land a high round hill, which men doe call the Boate turned up ſide downe, which lieth out aboue al the lands thereabouts, and comming from the weſtwardes againſt Fleckerie, there ſhewe alſo three high double lands, which by litle and little ſeeme to goe to nothing towards the Drommels.

Three leagues to the eaſtwardes of Fleckerie lyeth Reperwick, a broade and wide Sound, lying in north, and north and by weſt. For to ſaile in there, you muſt runne in by the land of Wolffound (lying on the eaſt ſide of this hauen) leaving all the rocks, (and alſo where the maſts of Wolffound doe ſtand upon) on the ſtarboard ſide, and all the rocks of Ranſound on the larboard ſide, untill that you come to the ende, or within in the hauen, and then you muſt edge up to the weſtwardes about the poinr, and ancker there, that is a good hauen for ſhips that are bound to the weſtwardes.

Reperwick.

On the eaſte ſide of Reperwick lyeth Wolffound, before it lye two great Ilands, which ſhewe themſelues in high graye Rockes, with three or four Warders upon them, whereby you may knowe them.

Wolffound.

Wolffound is a narrow hauen for to ſail into, there ſtande two maſtes upon the Weſt-land, where you muſt goe in cloſe by, leaving them on the larboard ſide, and ſome litle rockes on the ſtarboard ſide, untill that you come within the greate Iland, whereupon the great Warders ſtand, there you may ancker, and lye landlockt for all windes. From thence you may runne foorth through within the rockes and come out againe into the ſea, by the old Hillfound, or you may runne out alſo at the Eaſtergatte of Wolffound, there ſtandeth a greate Warder on the weſt ſide of the gatte, upon a round high rock, there you may ſaile out or in by it where you will.

To the eaſtwardes of Wolffound lyeth olde Hilſound, but betwixt them both, at the point of the weſt ſide of old Hilſound lyeth the Iland of Blindſound, to the eaſtwards of it lye manie greate rockes, with two or three Warders upon them.

Old Hilſo.

For to ſaile into the old Hilſound, you muſt runne alongſt to the eaſtwardes of Blindſound with the rocks that lie by it, in by the weſt land, leaving them on the larboard ſide, and the foreſaide greate rockes or Holmes with the Warders altogether on the ſtarboard ſide, there are divers faire Sounds, where men may ſaile into and ancker in, without taking hurt. You may edge up to the weſtwardes about the point, and ſaile through betwixt the Ilands, that you can not ſee the ſea.

To the eaſtwardes of old Hilſound lieth Hamerſound, lying in northnortheaſt. On the weſt ſide of the havens mouth lyeth a ſuncken rock which you muſt avoyd, and ſaile cloſe alongſt by the Iland, which lyeth on the eaſt ſide of the hauens mouth, and ancker behinde the Iland right againſt the Warder, in thirtie fathom. The eaſter gatte lyeth to the eaſtwardes of that Iland, in and out northweſt, and ſoutheaſt: upon the weſt ſide lyeth a rock with a Warder.

Hamer-ſound.

To the eaſtwards of Hamerſound, men doe goe into Kerck ſound, and then a halfe league more to the eaſtwardes lyeth the hauen of Heſnes. Upon the Iland of Heſneſſe ſtande two Warders: thwart of them it is verie deepe, but towards the little church it is ſhowlder, to were, aboute thirtie fathome: the out rockes thereabouts are all redde of colour.

Kerckſound.

Heſnes.

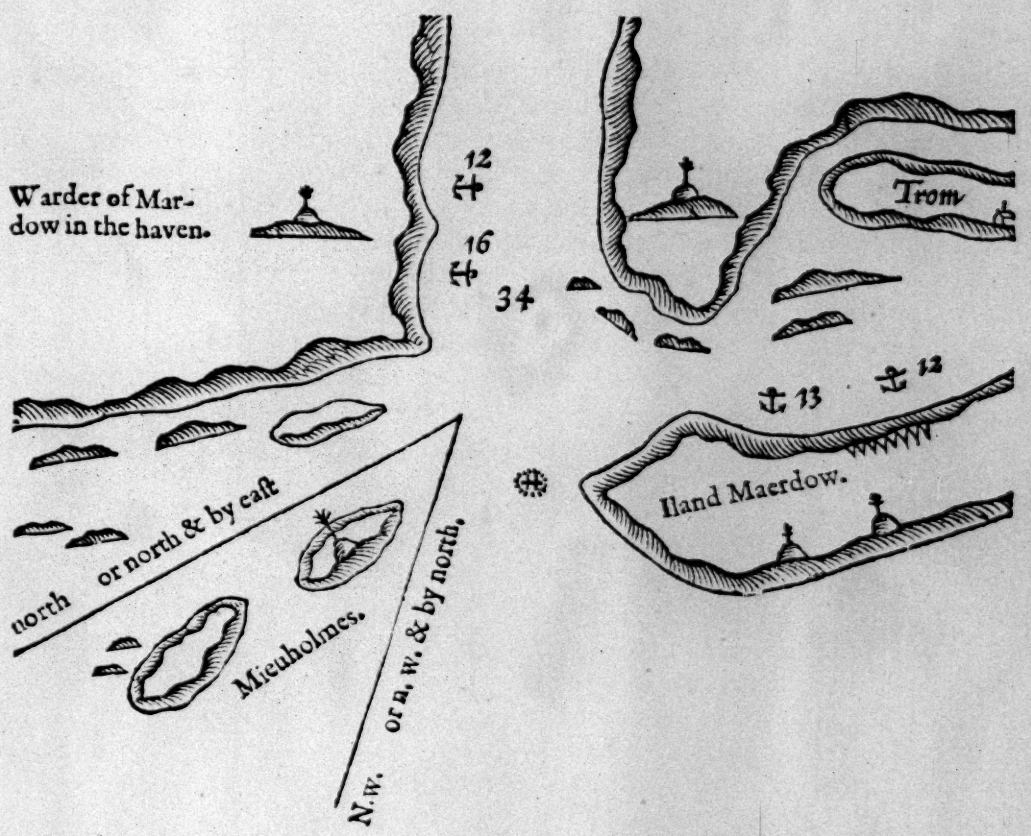
On the weſt ſide of the hauens mouth lyeth a ſuncken rock under water, called the Koenagle, upon the land ſtand two little maſtes, when they come one in the other, then you are thwarte of the Koenaghell. The two foreſaid litle maſtes, ſtand upon a graye Holme, leaue that on the ſtarboard ſide, and goe ſo ſtill inwardes, there it is high land, & the Drommels lye from thence northnorthweſt within the land, there you may ſaile through within the rocks, untill you come into Maerdow.

The Iland Maerdow ſtandeth (upon the top of it) full of trees, and round aboute it are all bare rockes. On each ſide of the Iland goeth in a channell. The weſter gatte or channell goeth in to the weſtwardes of the Iland, and the Eaſter gatte to the eaſtwardes of it. For to ſaile into the weſter gatte, you muſt leaue the Mewholmes (that are a few rockes and Ilands to the weſtwards of the Iland of Maerdowe) on the larboard ſide, and the Iland on the ſtarboarde ſide

Maerdow.

side, and run in so betwixt them both northwest and by north, but with a southwest wind, you must saile in northwest. Vpon the Northermost Miewholme standeth a Warder.

The Haven of Mardovv.



Thwart of the west end of the Iland Mardow lyeth a sunken rock under water, whereof you must take heed, when you saile in thus to the eastwards of the Miewholmes. When you are come within the foresaid west point of the Iland Maerdow, you may runne up towards the northeast behind it, & ancker in 12 or thirteen fathom, or saile up towardes the northnorthwest into the Sound, and ancker there on the west side in 16, 14, or 12 fathom, according as you saile farre in. In the going into the Sound, or haven, it is 34 fathom deep.

For to saile into Maerdow thorough within the Mewholmes.

With a bare winde, or otherwise, you may saile also into this wester-gat of Maerdow to the westwards of Miewholmes, thus: To the westwards of the southermost Miewholme, not farre from it, lye two litle rockes, even aboue water, and a little further off from it two other rockes which are somwhat greater, you must runne in amidst the chanell through betwixt them, leaving the two smallest lying on the starboard side, and the two greatest on the larboard side, that chanell, lyeth thorough most north and north and byeast. Being come to the end of the Miewholmes, you may saile up either towards the northeast behinde the Iland Maerdow, or westwards into the haven, as is before said. There goeth somtimes a good tyde out of this haven, and the westerly windes doe blow commonly out of this chanell betwixt the high lands, therefore he that will will come in here with a westerly winde, must be very carefull, and keep up his topsailes, or els he should lightly not be able to get the haven, but driue out of it against his will.

The Easter-gat lyeth in w.s.w. there lyeth a suncken rock on the starboard side, when you saile in therefore you must run in close by the Iland. It is not deeper there in the gat or chanell then three fathom, but being come within it, you shall finde it deeper, you may ancker there under the Iland in 12 or 13 fathom, or you may run up to the westwards into the Sound, as is beforesaid. To anckor under the Iland there is the showldest water, but with a n.w. or n.n.w. winde, it is not so good to come from thence as out of the haven, but with an easterly winde it is better to set sail frō thence, and to get into sea. When the Drommels are n.w. and n.w. and by north from you, then you are right thwart of Maerdow. If you run in so out of the sea, right with

The Easter gat of Mardow.

Markes of Maerdow.

the Drõmels, you ſhal ſal right with Mardow, that is a certain mark to know whether you be thwart of Maerdow, or to the eaſtwards or the weſtwards of it, but whé you are cloſe before the land, or before the havens mouth, you cannot ſee the Drommels, becauſe they are then hidden of the cliffe land.

About halfe a league to the eaſtwardes of Maerdow ſtandeth a litle white Church upon the ſea ſide, to the eaſtwards of it goeth in the Trom-ſound, being a faire Sound. Without in the comming in, ſtand on the eaſt or north ſide two Warders upon a high hill, you muſt ſaile in by them, and thwart of them you may alſo anker, and from thence you may ſaile in further behinde the Iland Trom, and the land of Maerdow, untill you come into the Sound of Maerdow.

Tromſound.

About a league to the eaſtwards of Trom-ſound lyeth the haven of Oxefordt, which is a great broad, and large Sound, lying in firſt without betwixt the rocks, north. Without in the comming in to the weſtwards of the havens mouth, lyeth a long rock, which you muſt leaue on the larboard ſide, and ſomwhat paſt that long rock lieth a ſunken rock which you muſt leaue on the ſtarboard ſide, & run in ſtill north unto the weſt point of the land, thwart whereof lyeth a ſuncken rock which you muſt avoid, when that you come then within the weſt point, you muſt ſaile in north-weſt and northweſt & by north, and anker on the north ſide of the haven, there it is wide & broad, with many bights, where you may anker every where in 20 & 25 fathom.

Oxeſoort.

A league to the eaſtwardes of Oxefordt lieth Longhen, before it lies a litle round Iland or rock on the eaſt ſide of the haven, upon which ſtandeth a maſt with a barrell upon a Warder. For to ſaile in there, you muſt run in cloſe by that land where the Warder with the barrell ſtandeth upon, cloſe alongſt by the Warder, but there ſtandeth a hand on the ſtarboard ſide of the havens mouth, which pointeth that there lieth thwart of it a ſunken rock under water, there you muſt edge ſomewhat off from the ſhore. Being within there, you may run to the eaſtwards againe into ſea, and come out in the Sound of Sandtvoordt.

Longhen.

When you are before Oxefordt & Longhen then the Drõmels lie about w.n.w. from you.

Market of Oxefoort & Longhen. Santvoort.

A great league to the eaſwards of Longhen lieth Sandfort. For to ſaile in there you muſt leaue all the litle rocks on the ſtarboard ſide, & run ſo alongſt by the land untill you come within the Long-holms which remain on the larboard ſide, and then right into the Bight. This is a faire haven, men come into it from the eaſtwards. Thwart of Sandvordt lieth a bank at ſea, which at ſome places is not deeper then 3 or 4 fathom, & lieth alongſt to the eaſtwards untill thwart of Weſtkiell.

A league to the eaſtwards of Santvoort lieth the haven of VVeſtkiell, a little to the eaſtwards of it lieth Iofferland. For to ſaile into VVeſtkiel, you muſt leaue all the great rocks (which lie off from Iofferland on the ſtarbord ſide, and all the foreſaid litle rockes of Sandtvoort, and alſo a white holme whereupon a maſt ſtandeth on the larboard ſide, and run in firſt n.w. and afterwards n.n.w. and at laſt north, untill you come about the weſt point, and then you muſt edge up northweſt to the north ſide of the Ilands which lye within the haven, there is a Voſſe, or an Overfall of water, there you may ancker in 20 or 25 fathom. Weſtkiel. Io Ferland.

VVhen you come before VVeſtkiell you may ſee within the land three high hills, and alſo the high land of Longſound, lying northwards from you, that land is altogether very good to be known, he that ſeeth it once, and taketh regard of it, ſhall know it very well another time, when he commeth thereabouts.

From the northermoſt rocks of Iofferland unto the Baers, that is the ſouthermoſt or weſtermoſt point of Longſound, the courſe is n.n.e. a great league. Betwixt them both lie two havens, Eaſtkiell and Abbefoort, men ſail in there to the eaſtwards of the out-rocks of Iofferland. From theſe foreſaid northermoſt out-rocks of Iofferland unto Eaſtkiel, it is northweſt about a league, but to Abbefoort n n.w. and north and by weſt alſo a league. Men may (comming from the ſouthwards, or from Weſtkiell) ſaile through within Iofferland, into Eaſtkiell, or Abbefoort. The Baers.

For to ſaile through within Iofferland from Weſtkiell, the Sound lyeth through the chanell firſt northeaſt and northeaſt & by north, and then eaſtnortheaſt, and afterwardes againe northeaſt, and then you come to a place where the Sound is ſomewhat broader, there lyeth a ſuncken rock, which you muſt leaue on the ſtarboard ſide, and edge to the north ſhoare. Being paſt that, you ſhal come againe in a very narrow Sound, which lyeth through moſt northeaſt, and is at ſome places ſo narrow, that the yard armes doe almoſt touch the rockes. Being through that narrow place, you muſt goe northeaſt and by eaſt, and eaſtnortheaſt, untill you come thwart of the Longſound, then you may ſaile in there northnorthweſt, or ſaile into the ſea as you will: Behinde Iofferland you may alſo anker in 15 and 20 fathom. Roade behinde Iofferland.

How

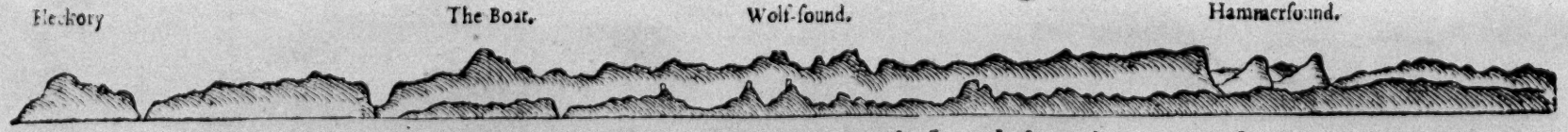
Howw theſe Lands doe ſhewv themſelues at ſea.

Thus ſheweth the Cow and Calfe being foure or fiue leagues north and by eaſt from you.

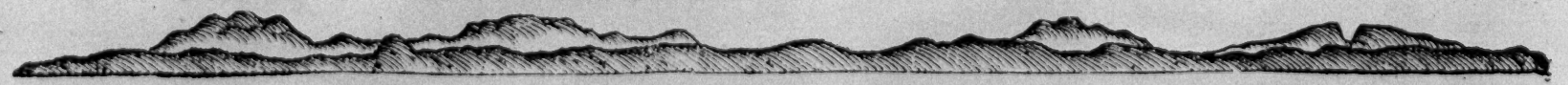
Thus ſheweth the Cow and Calfe when you come from the weſtwards and are thwart of them.

Thus ſheweth the Naze being foure or fiue leagues weſt from you.

Thus ſheweth it ſelfe the land of Norway betwixt the Naze and Fleckory when you are about fiue leagues off from it.



The land betwixt Fleckory and Maerdow, or the Drommels, ſheweth thus when you come from the weſtwards, and ſaile alongſt by it.



Thus ſheweth the land betwixt Maerdow and Longſound when you are about Longhen fiue leagues without the land.

Of the ſetting of the ſtreames on theſe coaſts.

ALthough that the water doe fall up and downe on theſe coaſts of Norway, yet nevertheleſſe it holdeth no certaine tyde: there goeth at ſome times of the yeare, and eſpecially in the Spring, ſuch a ſtrong current to the weſtwards alongſt Norway, that a ſhip lying by with a ſtorme out of the ſouthweſt, ſhall not drive to leewards, if it can beare ſail. The neerer to the land under Norway, the ſtronger current goeth. This current cometh falling out of the Belt, on againſt the land of Northeaſt, and ſo turneth about alongſt by the coaſt of Norway out into the North ſea. Read further thereof in the ſixth chapter of the firſt book.

How theſe lands doe lye one from another, and from other lands.

FRom the Naze to Schareſound eaſtnortheaſt 3 leagues
From the Naze to Fleckory eaſtnortheaſt 8 leagues
From the Naze to Ryperwyke eaſtnortheaſt 10 leagues
From Fleckory to Ryperwyke or Wolf-ſound eaſtnortheaſt, and northeaſt and by eaſt — — 3 leagues
From Wolf-ſound to Blind-ſound northeaſt — — — 3 leagues
From Blind-ſound to Maerdow northeaſt — — — 4 leagues
From Wolf-ſound or Reperwyk to Maerdow northeaſt 8 leagues
From Maerdow to Iofferland n e. 8 leagues
From Maerdow to Eaſtryſen northnortheaſt 3 leagues
From Iofferland to the Longſound northnortheaſt one great league.
From Fleckory to Iofferland northeaſt — — — — 19 leagues
From the Naze to the Scaw, or Schaghen, eaſt 33 leagues
From the Naze to the Holmes in Iutland ſoutheaſt 19 or 20 leagues
From the Naze to Bovenberghen ſoutheaſt and by ſouth 24 leagues
From the Naze to Holyland the courſe is ſouth & by eaſt, and ſ.ſ.e. 67 or 68 leagues
From the Naze to the Eems ſouth ſomwhat eaſterly 75 or 76 leagues
From the Naze to Bornriffe ſouth ſomewhat weſterly 83 leagues
From the Naze to the Teſſell or Marſdeepe the courſe is ſouth and by weſt diſtant 93 leagues
From the Naze to Walcheren ſouth and by weſt 125 or 126 leagues
From the Naze to the Heads, or the Strait betwixt Callice and Dover the courſe is ſouthſouthweſt, or ſomewhat more weſterly 143 leagues
From the Naze to the Holmes before Yarmouth ſouthſouthweſt ſomewhat weſterly 104 leagues
From the Naze to Flambrough head ſouthweſt 100 leagues
From the Naze to Scarborough ſouthweſt 99 leagues
From the Naze to the river of Newcaſtle ſouthweſt and by weſt ſomewhat weſterly 104 leagues
From the Naze to Lieth in Scotland weſtſouthweſt ſomwhat weſterly 103 leagues
From the Naze to Boeckneſſe weſt ſomwhat northerly 88 or 89 leagues
From the Naze to Fairhill w.n.w. 93 leagues
From the Naze to Hitland the courſe is n.w. and by weſt about 100 or 101 leagues
From the Kloof or the Cow and Calf to the Scaw the courſe is eaſt and by ſouth ſomewhat eaſterly 30 leagues
From Fleckory to the Holmes in Iutland ſoutheaſt and by ſouth 19 leagues
From Fleckory to the Scawe eaſt and by ſouth 25 or 26 leagues
From Reperwyke to the Scaw eaſt and by ſouth, and eaſtſoutheaſt 24 leagues
From Maerdow to the Holmes the courſe is ſouth 24 leagues
From Maerdow to the Scaw ſoutheaſt and by eaſt 20 or 21 leagues

Duytsche mylen 15 in een graad
Engelsche en Fransche mylen 20 in een graad
Spaansche mylē 17½ in een graad
Ansloo
De Bodem
Schiphil
Wijckstee
Mosonde
t'Soen water
Holmsondt
Roobroeck
Akershuys
Brukenesse
Copenwijck
De Buy
De Vos
Poolse gronden
Kaaleers
Kalbyn
't Noort water
Noortwester water haff
Statthil
Cominx haven
Abbefoort
Oostkiel
Isserlandt
De Zeecusten van Noorwegen, tusschen de Langesondt en Pater nosters.
Markeboet
Tonsbergen
Marishol
Swymen
Laerwyck
Stavange
De Nesse
Oude Langesont
Cominx Eylant
De Baers
Farder
Grasswijck
Elsange
Roye
De Susters
Monnicks Eylant
Bast
Ostrum
Schiphil
Mosondt

Noorderwijcx holm

Zuijderwijcx holm

Dystelbergh

Langebergh

Boschschaer

Harmensgat

Kreyssandt

Harmenshoeft

Pater noster

Schagen

35

40

12

CHAPT. II.

The coasts of Norvvay betvvixt the Longsound and Maelstrand.

THE Longsound is one of the faireſt havens of all Norway, and lyeth north-northeaſt from Iofferland diſtant one great league. Before old Longſound lyeth a high round rocke, whereupon ſtandeth a great round Warder, for knowledge of this haven. Coninexhaven that is the ſouthermoſt or weſtermoſt chanell of the Longſound, and goeth in betwixt the weſtermoſt rough point and Conings Iland, and then men run alongſt to the eaſtwards of the Baers, which lyeth off from the foreſayd rough point. For to ſaile in there, you muſt run in amid chanell, and ancker in the Coningſhaven in 28 and 30 fathom.

Conings-haven.

For to ſaile into the Neſſe (that is on the north ſide behinde the eaſtermoſt point of Longſound) you muſt run through betwixt the great rock, whereupon the Warder ſtandeth, and the land of old Longſound, leaving the foreſayd rocks on the ſtarboard ſide, and ſo alongſt about that rough Iland, untill you come into the Neſſe, which lyeth behinde a chindle ſtrand, there you ſhall lye under a chindle of rockes like red ſand: there lye alſo ſome litle rockes thwart of that chindle. This is a good handſom haven, and light for to come into, there it is 24 and 25 fathom deep.

The Neſſe.

A league to the eaſtwards of the Neſſe, or eaſt point of the Longſound, lyeth Stavange, that are ſome out-rocks, where men may ſaile within on both ſides, to the eaſtwards of it lyeth the Sound of Laerwyck.

Stavange.

Laerwyke.

The Laerwyck is a great broad Sound, where are many Bights and Lade-places, where men may lye and lade Firre-timber. From the eaſt point lyeth off a great rane of rocks a good wayes off ſoutheaſt and by eaſt into ſea, and run in almoſt halfe the Sound, called the Laerwykes Swines, whereof men muſt take heed. Within in this Sound it is flat water and ſhowld, ſo that farre within no great ſhips can lye afloat.

Farder.

From the Laerwyk unto the Iland Farder the courſe is eaſtnortheaſt foure leagues, betwixt them both lyeth the litle towne Tonſberghen in a great Bight. And from Farder to the Iland Baſt the courſe is north and by weſt fiue leagues, betwixt both lyeth a fowle point. To the ſouthwards of Baſt lyeth Markenboet, and the Bight of Asko, but to the northwards of Baſt lyeth Lowſound.

Baſt.

From the Iland Farder to the Soen-water, the courſe is north, but from Baſt north and by eaſt. The Soenwater lyeth in moſt north. Vpon it lye many havens and lade places, moſt on the ſtarboard ſide as you come in. Firſt there is Mos-ſound, a haven that goeth up to the eaſtwards, and then there is Wykeſtee, which is a bight behind an Iland, afterwards Ship-hill, a ſandbay and a very good road, that goeth ſo up alongſt to the northwards unto Anſlo, and then it turneth about to the ſouthwards into the Bottom.

Soenwater.

Wykeſtee.

Ship-hill.

When you ſaile from Farder or Baſt unto Soenwater, you ſhall meet with a red poynt, betwixt the Soenwater and the Copperwyke. He that is bound into Soenwater muſt run alongſt to the eaſtwards of it, but hee that is bound into Copperwyke muſt goe up alongſt to the weſtwards of it, and leaue it on the ſtarbord ſide. VVhen that you come within the Lams, you ſhall eſpie a litle church upon the weſtland, there is the lade place of the Copperwyke you may ſail up from thence to Braknes On the north or eaſt ſide lies Holmſound From Farder to the point of Roge the courſe is n.n.e. 5 leagues. At the eaſt end of Roge you may anker, there is a plain ſtrand, you may run through betwixt the Roge & the Calf, but if you will anker under Fletto, then you muſt run through within the two ſmall rocks.

Soenwater.

Copperwyk.

Brakenes.

Holmſound.

Roge.

From Baſt unto the Siſters the courſe is s.e. 5 leag. Behind the Siſters to the ſouthwards of the point of Roge, lyeth the haven of Elffang, diſtant from the Iland Farder n.e. and by eaſt 5 leagues. VVhen yon come off from Farder, you muſt run through within the roks which lye within the Siſters until you come againſt the land, there you ſhal find a great gray rock, which you muſt leaue on the laaboard ſide, and the ſmall rocks that lye there within on the ſtarbord ſide, & then alongſt about by the weſt land, & then the haven opens it ſelf, which is narrow, & within flat & ſoft ground.

The Siſters.

From the Siſters to the Iland of Akerſound the courſe is eaſt & by ſouth 4 leag. betwixt them lyeth the Graſwyke within the Siſters, lying from Farder e.n.e. about ſeven leagues. VVhen you will ſaile in there, you muſt leaue the ſharp point on the larbord ſide, within lyeth a round rock which you may ſail about on both ſides, thwart of it is good ankerground. North from this rock lyeth a great Bay fit for ſhips to lye in, that tarrie for a winde: within lyeth alſo a round rock. Men doe runne in alongſt by the VVeſt-land, which lyeth in firſt North, and about the Iland

Akerſound.

Graſwyke.

northnortheaſt, they leaue the Iland on ſtarboard ſide, and run in n.n.w. by the weſtland. To the eaſtwards of Graſwike, alſo betwixt the Siſters and Akerſound lieth Shiphill, that is a haven where men lade Spars & fat wares.

The Iland Akerſound men may ſail round about it, to the northwards of it lieth a great Bay or Sound, lying in farre within the land, called Ottrom.

Ottrom.

Northerwixholme. Southerwixholme.

To the ſouthwards of Ottrom lie Northerwixholm & Southerwixholm, to great Ilands, in a great Sound which lieth farre and deepe within the land, upon it (far within the land) lye many litle townes, as Oldburgh, Oldwat, Alleroes and Dragens, from thence cometh much fat ware. Southerwixholme & the Iland Akerſound, lye northweſt and by weſt, and ſoutheaſt and by eaſt fiue leagues aſunder.

Harmanshead.

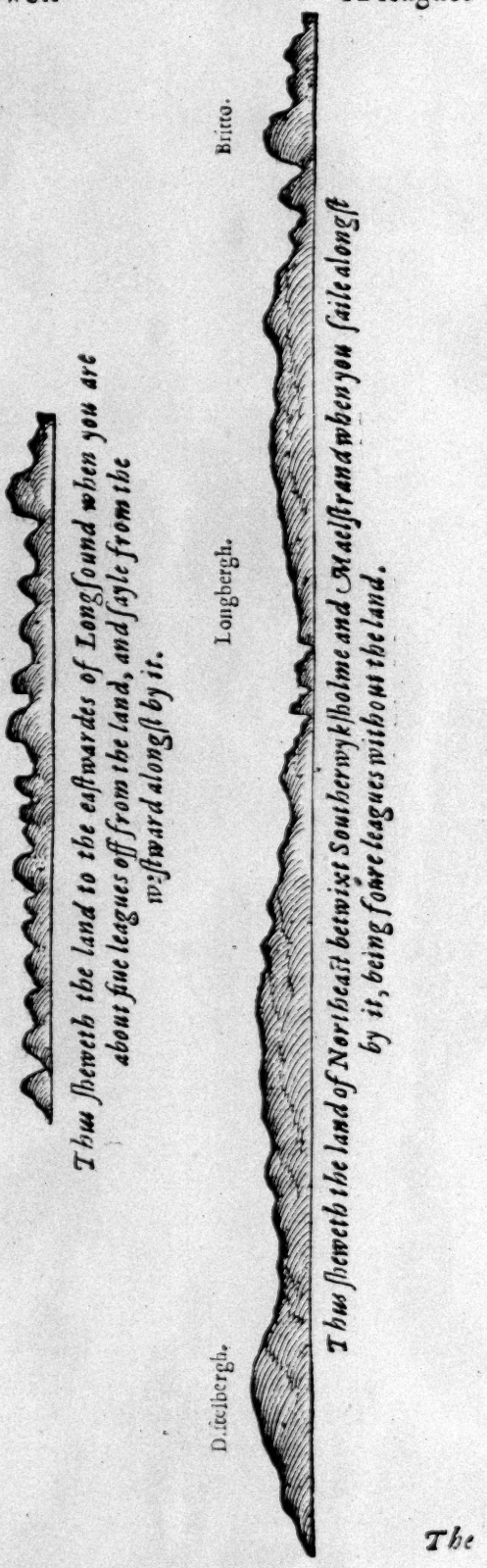
From Southerwixholme to Harmanſhead the courſe is ſ.ſ.e. fiue leagues, betwixt them lyeth Boechſchaer, but two leagues to the ſouthwards of Harmanſound lieth Kerkſound, which is a great river which lyeth in farre within the land.

Harmanſhead & the weſt end of the rocks (which men doe call the Paternoſters) lye north and by weſt, and ſouth and by eaſt fiue leagues aſunder, to the ſouthwards of them men doe ſaile into Maelſtrand. Vpon the coaſt betwixt Farder and Maelſtrand, is almoſt every where good anker-ground in fiue and thirty and forty fathom.

Of the ſetting and courſe of the ſtreams in theſe places, read in the former chapter.

How theſe lands do lye one from the other, and from other lands.

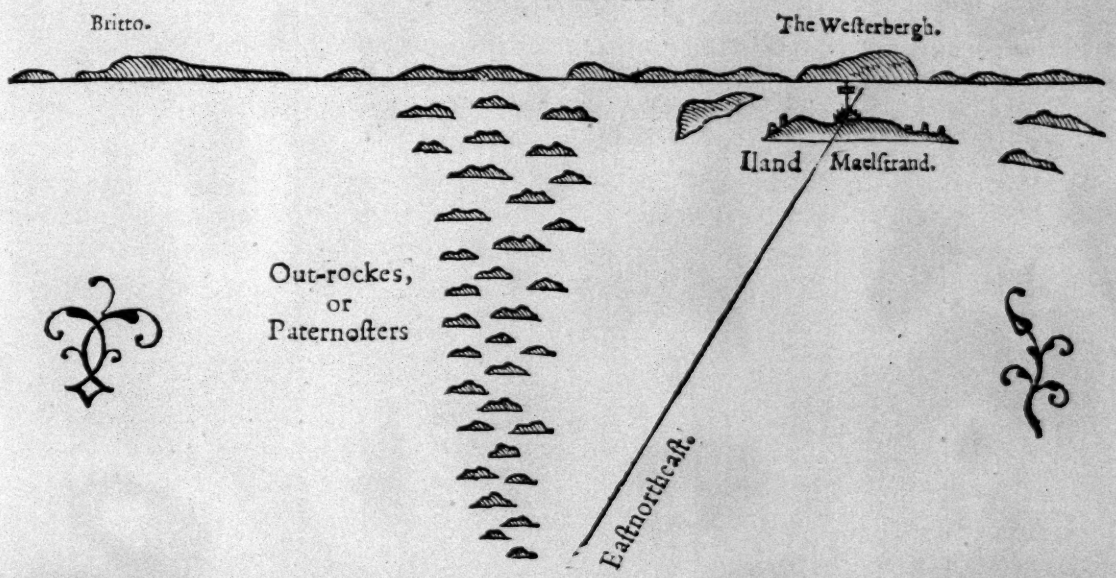
FRom Longſound to the Iland Farder eaſtnortheaſt 8 leagues
From Laerwyke to Farder e.n.e, 4 leagues
From Farder to Monk Iland, or Roge, northnortheaſt 5 leagues
From Farder to the Iland Baſt north and by weſt about 5 leagues
From Farder to Soenwater north or ſomewhat more eaſterly 8 leagues
From Baſt to the Copperwy n. & by w. 4 leag.
From Baſt to the Red point, or Soenwater, northnortheaſt 4 leagues
From Baſt to the Siſters ſoutheaſt 5 leagues
From the Siſters to Aker-ſound eaſt and by ſouth 4 leagues
Frō Akerſound to Southerwykſholme ſoutheaſt and by eaſt 5 leagues
From Southerwykſhome to Harmanſhead ſouthſoutheaſt 4 or 5 leagues
From Harmanſhead to the weſt end of the Paternoſters 5 leagues
From Longſound to the Holmes ſouth & by weſt 35 or 36 leagues
From Longſound to the Scaw ſoutheaſt and by ſouth, or a litle more ſoutherly 21 leagues
From Farder to the Holmes ſ.ſ.w. 40 leagues
From Farder to the Scaw ſouth and by eaſt 22 leagues
From Ottrom to the Scaw ſouth and by weſt 24 or 25 leagues
From Harmanſhead to the Scaw ſouthweſt and by ſouth 16 leagues
From the Paternoſters to the Scraw weſtſouthweſt 12 leagues



CHAPTER. III.

The Coasts of Norvvay and Svveden, betvvixt Maelstrand and the Cole, and hovv men shall saile through the Reach of the Scavve.

Maelstrand.



Paternosters.

THE Pater-nosters are a great rane of rocks, which lye farre off to seawardes from the coast, behinde them, to wit, on the south side, goeth in, within the land a broad Sound, upon the south side of it lyeth a great high round rock or hill called Britto. To the southwards of that Sound lyeth the Iland of Maelstrand. He that cometh from the Scaw, and desireth to saile to Maelstrand, let him goe on eastnortheast, and then he shall get sight of the foresaid hill Britto, which he shall set eastnortheast from him, and so saile in right with it, untill that hee commeth by the Paternosters, which hee must leaue on the larboard side, and saile alongst by them eastnortheast, and east and by north, and then he shall run in sight of the Iland Maelstrand, upon which standeth a great stony beacon, or Warlock, where sometimes standeth a mast with a barrell upon it, and somtimes also there standeth none. You may run in on both sides of the Iland, either about to the northwardes, or to the southwards of it, according as shal be best fitting for the wind: If the winde be at west, or southwest, then you may best run in at the norther chanel, or if the winde be at south or southeast, then it is best to run in at the souther chanell. The norther chanell lyeth in by the south side most east and by south, & eastsoutheast, but the souther chanell east & east and by north. When you come within the Iland, you may sail about by it, until you come before the towne, which you shall see then lying before you. Men doe anker there with an ancker to seawards out a head, and make fast a cable out a stearne on the kaye, lying so with the stearne to the shoare.

About the middest, going in at the souther chanell lyeth a rock aboue water, which you may saile about on both sides, but within that rock lieth a suncken rock under water, and to the southwards of it also a great rock, but a litle further out then the other. There lyeth also a suncken rock under water by the Iland on the north side of the foresaid rock which lyeth aboue water, which men must be very carefull to take heed of. There is every where good ancker-ground. From thence you may saile through within the rocks to Calf-sound, Bahouse and Nilus.

Calf-sound lyeth distant from Maelstrand about foure leagues. For to saile in there out of the sea, you must run alongst to the southwards of a great rock, whereupon standeth a Warder. On the south side of the havens mouth there are great rocks, but on the north side all small rocks. When you come within the rocks about the point of the north land, there you may ancker in 15 or 16 fathom, there is good anker ground. From Calf-sound you may run up to Bahouse, & then you leaue Congell lying on the larboard side. You may also saile up to the southwards, through within the rocks unto the river of Nilus. Calf-sound.

Foure leagues southsoutheast from Calfe-sound, lyeth the Iland Winnen, to the southwards of it goeth in the chanell of Nilus or Gotten-

Gottenburch, which is a large & broad ſound lying in n.n.e. in 8, 9, & 10 fathom, you muſt leaue Winneu on the larboard ſide, and run in betwixt the point of the maine land, called Kelderhead, and the Iland litle Denmark, and then in alongſt by the main land on the ſouth ſide, untill paſt Elsburgh to Gottenburgh, it is there all cleane and cleare without any danger that might hurt you. Gottenburg.

You may alſo ſaile in to the northwards of Winneu, then you muſt leaue Winneu, and alſo ſome long rocks on the ſtarboard ſide, and the rough Iland, or litle Denmark, on the larboard ſide, and then in alongſt by the point of the main land, on the ſouth ſide, as is before ſaid.

Two leagues ſ.ſ.e. from VVinno lie Maelſound & Conſback: Maleſound is a rough Iland, which you may ſaile round about in 7 or 8 fathom, under it is alſo good road. Two cables lengths w.n.w. from Maleſound, lyeth a ſuncken rock under water, and alſo one even with the water, a bow ſhot frō the land whereupon ſtandeth a VVarder. Maleſound.

Conſback. Eaſtnortheaſt from Maleſound lieth the haven of Conſback, there ſtand two great warders, each upon a rock cloſe to the land, betwixt them lieth in the haven, it is a faire haven, ten fathom deep, & good anker-ground, when you come about the low point you ſhal ſee Conſback lye to the northwards of you.

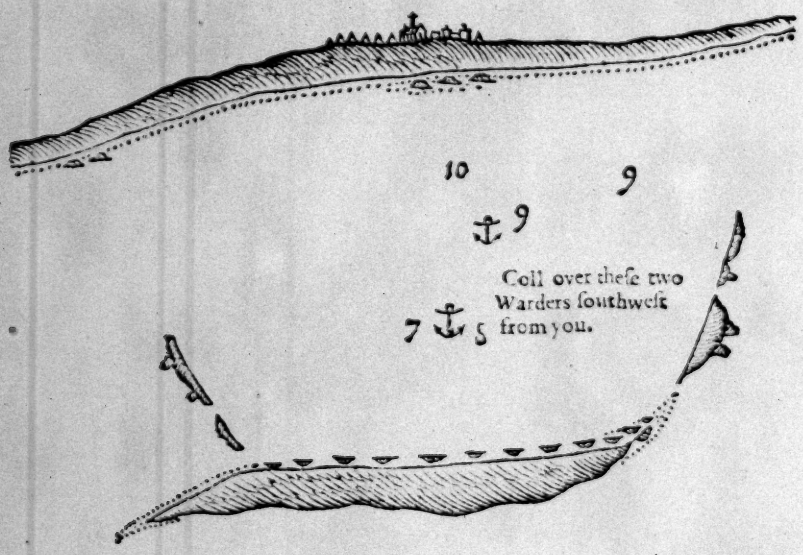
Southweſt and ſouthweſt & by weſt a league and a halfe, or two leagues to ſeawards from Maleſound lyeth the foule & dangerous rock Nyng, or Nyding, even aboue water, ſo that the ſea doth almoſt break over it, wherof you muſt take very good heeed. You may ſail thorough betwixt Nyding and Maleſound or the main land, but it is there all ſhowld water. Nydiagh.

Monſter-ſound. Waterſ-berghen. From Nyding to VVaterſbergen the courſe is ſ.e. 5 leagues, betwixt them (three leagues to the ſouthwards of Maleſound) lieth Monſterſound, that is a river or Sound, which runneth up into the land, upon it lye ſome towns as Vlymenes, Horn, & Goſewaer. From Monſterſound 3 leagues to the ſouthwardes, lyeth VVatersbergen. For to ſail in there, yon muſt run in by the eaſt land. At the point of the Iland which lyeth on the n. w. ſide before the haven, lyeth a rock under water, and from the point where the caſtle ſtandeth upon, lyeth alſo a ſunken rock, both which you muſt avoid, and therefore run in amidſt the channell, betwixt the foreſaid Iland and the maine land, where the caſtle ſtandeth vpon the point, and anker when you come within the point right againſt the caſtle in 4 or 5 fathom. For to ſail into VVatersberghen by markes, you muſt bring Oldboey to the north ſide of the caſtle, and go in n.n.e. there lyeth a rock even with the water, which you muſt leaue on the ſtarboard ſide, and ancker right againſt the caſtle in 4 or 5 fathom, as before is ſaid.

Two leagues to the ſouthwards of VVaterſ-berghen lyeth the river of Valckenburgh. On the north ſide of the Rivers mouth lyeth an Iland called Murupſinghe, and 3 leagues to the ſouthwards of it lieth an Iland called Tullo, betwixt that Iland & Valckenburgh within the land, lyeth a high hill, called Haver, being white to ſee to, as if it were ſandy land: Seafaring men do name it yong Coll, becauſe of the likeneſſe of height and faſhion, which it hath like Coll, and ſometimes it is miſtaken for Goll. Valckenburgh. Tullo.

Three leagues eaſtwards from Tullo lyeth Helmſtee upon a litle river, but there can goe in no ſhips, but onely Huyes and boates. Helmſtee.

Two leagues ſouthwardes from Helmſtee lyeth the litle towne, or litle caſtle called Laholm, there goeth alſo a little river into the land. A league weſtwards from Laholme lieth Bosſtadt, theſe places lye in a great bay. Laholme.



Babuis
Nileus
t'Landt van
SVE
Noord
oosten
Kongel
Winder stuvi
Elsborch
DE
N
Britto fourt
Britto berch
Calsfont
Reefsont
Corsback
Monsterfont
Waersberge
Maestrant
T'gat van Nileus
of van Wimo
Wigmo
T'gat van Babuis
T'gat van Malefont
Malefont
T'gat van
Monsterfont
Nyno
T'noordr gat van Mastlerlant
T'zuyder gat van Mastlerlant
Pater Nosters
De Trindel
Schager rif
Lesou
t'Vlack
Schagen
Cleine helmen
Dwaalgronden

HA LANT

Helmste

Laholm

Engelholm

Bolßtadt

Katterup

Turko

Valckenborgh

Haber

Bunshuys

Tessot

Tunsio

Swedero

Kraptop

Kol

Rif van Anout

Anout

Luys gronden

Hoeck van Zeelandt

Rif

Haselin

Duytsche mijlen 15 in een graadt

Engelsche en Fransche mijlen 20 in een graad

Spaansche mijlen 17½ in een graad

13

Swedereur.

THree leagues to the weſtwardes of Bosſtadt lyeth the Iland Swedereur, you may runne in behinde it at both ſides, for to ancker from the northwardes, it is there large and broade for to goe in: but from the north ende of Swedereur ſhooteth off a little ledge of rocks, you muſt runne alongſt to the northwards of the rocks, that lye at the north ende of Swedero, leaving them on the ſtarboard ſide, and ancker behinde the Iland, betwixt the greate and litle rockes in ſeuen fathom, thwarte of the litle white church of Turcko, ſo that the greate rock with the two warders at the ſouth end be ſouthweſt from you, and Col ſtand over the foreſaid Rock, there it is beſt lying, and there you are landlockt for all windes. If you wil run out again to the ſouthwards of it, then leaue the two rockes with the warders on the ſtarboard ſide, and runne boldly cloſe about by them, towards Coll.

He that cometh off from Anout, & by reaſon of ſoutherlie windes cannot run a weather Col, let him goe from Coll northeaſt and by north towards Swedereur, and runne cloſe aboute by the two foreſaid rocks with the Warders, at the ſouth ende of Swedereur, until he come behind the Iland, and ancker, as is before ſaid, there it is ſoft ground. A north winde bloweth there open in.

Coll. From Swedereur to Coll the courſe is ſouthweſt and by ſouth, betwixt both lyeth a greate baye, upon which lieth that little towne Engelholme, where men alſo may ride.

For to ſaile from the Scaw to Coll.

FRom the Riffe of the Scawe to the Iland Leſou the courſe is ſouthſoutheaſt, but the pointe of the Riffe & the Trindel lye due ſoutheaſt and northweſt 8 leagues aſunder.

Leſou The Iland Leſou is compaſſed round aboute with foul Dwaelgrounds Riffes and ſands, that lie off. From the ſoutheaſt end wher the church ſtands upon, lieth off ſuch a great riffe or ſhould from the ſhoare, that aboute 3 leagues from the land to the ſouthwards of it, it is not deeper then two fathome, there under it you may make rode for a ſ.ſ.e. winde. Likewiſe from the ſouthweſt point, lyeth off ſuch a great ſhowlde, that when the foreſaid flatt church is eaſt, and e.n.e. from you, you cannot come neare the land vvithin 3 leagues. But the north ende you may come ſo near, that you may haue rode under it for a ſoutherlie & ſoutheaſt winde, in three, four, fiue, ſixe and ſeuen fathome, the church being about ſouth from you.

From the northeaſt ende lyeth off a'ſo a riffe right towardes the Trindell, which you may found about, when you ſaile through betwixt Leſou and the Trindell, which is the nearer Leſou the ſhowlder, and the nearer the Trindel the deeper. Cloſe by the Trindell on the inner ſide or vveſt ſide, it is deep fiue and ſix fathome. Riffe of Leſou.

The Trindell is a ſtonie ſand plate, three cornerd, & ſomewhat long of faſhion, it is no more then four foot deep, and about two akers of land greate, and lyeth moſt alongſt the farewaie, lying from the northeaſt ende of Leſou northeaſt, or a litle more eaſterly aboute 3 leagues diſtant. On the northeaſt ſide of the Trindell lyeth alwaies a great buye, whereby you may know it a farre off. Trindel.

When the point of the Scaw is northweſt and by weſt aboute a league from you, there it is ſeuenteene and eighteene fathome deepe, but when the point lieth weſt, and weſt & by ſouth from you, aboute a league, there it is four or fiue and thirtie fathome deep. Depths about the Scawe.

But he that cometh ſayling about the Scawe, and runneth vvithout the riffe, in tenne, eleuen, or twelue fathome, and goeth on from thence ſoutheaſt, or ſouthſoutheaſt, keepeth a long while ſtill, the depth of fifteene and ſixteene fathome, at leaſt the ſpace of three leagues, before he gette twentie, or fiue and twentie fathome. When as that you beginne to get againe ſhowlder water of tenne, eight, ſeuen and ſix fathom, that goeth then through within the Trindell. When that you ſhall meete with the foreſaide depth of the ſhowlding, and ſaile yet further on ſouthſoutheaſt, then you muſt be verie carefull to uſe your lead often, becauſe of the foreſaide ſhoulde, which lyeth off from the northeaſt end of Leſou, towards the Trindell, you may runne over it, (as is ſaid) in fiue, four, and alſo well (in the narrowe) in three fathome. When the northeaſt pointe of Leſou beginneth to come ſouthſouthweſt from you, then you come on againſt the riffe or ſhowlde, but when the pointe is ſouthweſt from you, then you are over the ſhouldeſt of the riffe. When the weſt ende of Leſou is ſouthweſt, and the church ſouthweſt & by ſouth frō you, then you are aboute thwart of the buye of the Trindell.

Four leagues ſouth & by weſt from the Scaw lye the ſmall Helmes, not farre from the ſhoare, that are three litle Ilands, the ſouthermoſt the Iuttes doe call the Deyen, or the Dee, the middlemoſt Holmes, & the northermoſt Graſholm, by them lyeth yet another little Iland. You may ſaile through betvveen the ſouthermoſt and the middlemoſt, but then you muſt run neareſt the ſouthermoſt, through betvvixt them is four fathome vvater. The Helmes

Vnder the Helmes is good roade for ſouth-

east, southsoutheast and southerlie windes.
He that will goe to ancker under them, comming from the Scawe, must runne to the strand in three fathome, and runne so alongst by it, in betweene the strand and the Helmes, untill that he be within the rockes, there he may ancker, or also well runne through alongst by the foote-strand in three fathome. When the rockes of the Helmes are east, and east and by north from you, there is the roade in four fathome, and four fathome and an halfe. The best roade for to lye under the Helmes with small shippes, is betwixt the southermost & middlemost litle Iland, somewhat nearer the mainland then the Ilands: but for great shippes it is best to lye by the Grasholme.

He that wil not lye so far within the Helmes, may also ancker farther out under the high land of Lacklou, so that the Helms be southeast from him, in four, fiue sixe, or seuen fathome, there it is also verie good lying for south and southsoutheast windes, in clean ground, of smal white and black sand.

Betwixte the Scawe and the Helmes in the farewaie it is deep eighteen, sixteen and fifteene fathome. Betwixt the Helmes and the mayneland, there is at the shoaldest three fathom water. When you come from the northwardes through betwixt them, untill you come thwart of the south end of the rockes, there runneth off a litle riffe from the Helmes towards the strand, where the greate stones lye called Boutser riffe, but keeping in three fathome, you cannot take hurte of that riffe. You may well run out again by that south end towards Zeabuy. So that you may sail round about the Helms, with ships that are not of verie great draughts.

Betwixt the Helmes and Lesou a good waies from the Helmes it is 20 and 25 fathome deepe, soft ground, but one league east from the Helms lye some rockes or shoaldes, whereof you must take heede.

Dwael grounds. To the westwardes of Lesou lye the Dwaelgrounds, to the northwards of the foresaid riffe, that lieth off frō the southwest pointe of Lesou, where the flat church standeth upon, which are verie uneuen of three, four, fiue, and six fathom deep. Of these and more other shoaldes and uneuen groundes betwixt Lesou and Zeebuy reade the description of the norther parte of the Belt.

Rocks betwixt Lesou and the Holmes. About a league northnorthwest from the west end of Lesou, southsoutheast somewhat southerlie from the point of the Scaw, and eastsoutheast from the litle Helmes, there lie two or three litle low Ilands or rocks, a litle aboue water; betwixt these Holmkens, and the Helms it is twentie fathom, but betwixt these Holmkens and Lesou fiue fathom deep, to the northwards of them it is far flat, 4 and 5 fathom deep sand ground.

If you will sail by night off from the Helmes or from the high land of Lacklie towards Lesou with a southwest or s.s.w. winde, then saile no nearer because of these little Ilands and shoaldes then southeast and by east, with that course you shal run over those shoulds or flats, (lying to the northwards from these foresaide Holmkens) in six or seuen fathom, afterwards it vvil be deeper again, nine, ten and twelue fathome, go then on e.s.e. so long until that the east end of Lesou be s.w. from you. When that east end beginneth to come south and by west from you, then you come on against that flat, or rif, vvhich shooteth of from the northeast end of Lesou towards the Trindell. It doth shoald up from 14, 12, and 10 fathome, unto 8, 6, and 4, and also to 3 fathome. If you be somewhat near to Lesou, the three fathome lasteth a good whiles, and then it wil be again deeper, four, six, tenne and fifteene fathome, and then verie deep. When that foresaid northeast ende of Lesou is s.w. from you, then you are cleare of that flat. The Helmes and the Trindel lie east & by south and west and by north seuen leagues asunder.

For to saile within the Trindel. When you come from the Scaw with a s.w. or vvestsouthwest winde, and that you vvil saile through within the Trindel, that is, betwixt the Trindel and Lesou, it is best that you goe such a course, that you may make your waie good southeast and by south, and then you shal run alongst about the middest of the chanel, through betwixt the Trindel and the foresaid low rocks, (which lie n.n.w. off from the north pointe of Lesou, & s.s.e. from the point of the Rif of the Scaw.) At the deepest in this fare waie, betwixt the Scaw and Lesou it is 23 and 24 fathome, being past over that, you shal come against a banck of eight, seuen, and six, & also into fiue fathom, and then you shall be about due west, or a little more northerly or southerly from the buye upon the Trindel. Afterwards it vvil be again deeper, if you be in the right farewaie, to wete, 7, 8, 10, and also well twelue fathome.

For not to fail within the rif, or the northeast point of Lesou, it is good to run then somewhat more easterlie, to vvete, southeast, or southeast and by east, until you come against the foresaide riffe that lyeth off from the northeast pointe of Lesou, vvhich you may sound, and so runne about by it in fiue, four, and also three fathome. When the northeast point of Lesou, (that is the point with hommocks) is south & by west from you, then you come against the rif, & when that point is s.s.w. frō you, then you are right thwart of the rif, but when the point is southwest from you, then you shall be past and cleare of the rif. Being gotten aboute it towardes Anoure,

it will

it will be deepe thirtie, fiue and thirtie and alſo fortie fathome.

He that cometh by night about the Trindel, muſt not ſpare his lead, on the outer ſide, that is on the eaſt ſide of the Trindle you may not come no nearer it by night, then nyne or tenne fathome, and then you ſhall not be farre off from it.

When you ſaile cloſe alongſt without the Trindel in cleare weather, and that you ſtande without board, upon the bendes of the ſhippe with your feet by the water, then you can euen ſee Leſou. If that then in cleare weather ſtanding ſo without the ſhip, you cannot ſee Leſou, when you are about thwart of the Trindle then you runne farre enough alongſt without the Trindle.

The Trindle and the riffe of Anout lie northweſt and ſoutheaſt, or as ſome ſaye ſouthſouthеaſt and northnorthweſt nine or tenne leagues aſunder. Betwixt Anoute and Leſou in the right fare waie it is fiue & twentie fathom deep, but to the weſtwards of it, to wete, right betwixt the Ilands Anout & Leſou it is all ſhowld water, of ſeuen and eight fathome, you may ſaile there over theſe flats and ſhowlds through betwixt Anout and Leſou, into the Belt.

Depths betwixt Anout and Leſou.

Anout is upon the weſt ſide verie foule, and farre off to ſeawards from it, lye manie uneuen dwaelgrounds of two three and four fathome.

When you ſaile with a ſouthweſt or weſterly winde from Leſou to Anout, and runne over the flat of Leſou in three or four fathome, you neede not ſaile on more eaſterly then ſoutheaſt and by eaſt, although it be by night, you ſhall with ſuch winde and courſe run cleare enough of Anout. When as that you reckon to haue the length of the riffe, goe then on ſouthſouthеaſt, and ſouth and by eaſt, for to ſaile a wether of Coll. But by day or when you can ſee about you, not more leewardly then ſouthſoutheaſt. When you ſaile off from the foreſaid pointe of Leſou to Anout with a ſouthweſt or weſtſouthweſt winde, as is before ſaid, and make reckoning to come by night by Anout, then you can not doe better, as to goe eight, tenne or twelue glaſſes, (according as the winde ſhal blow freſh) on ſouthſoutheaſt, untill you come againſt the ſhowlding of Anout, and looke for the daye, that running not to far to leewards off the point of the riffe, you may the better gette a weather of Col. Likewiſe, when you come off from Col with a ſouthweſt or ſoutherly vvinde, and runne about a halfe league alongſt without Coll, you neede not alſo ſaile more northerly, then northweſt and by north, that goeth alſo a good waies alongſt to leewards of Anout riffe, and ſo forth towards Leſou. But when you come with a northeaſt winde out of the Sound, or from Col, you muſt runne out cloſe by Coll, if you wil ſail a weather of the riffe of Anout.

He that muſt lye by or turne to windwardes betwixt Leſou and Anout, and is bound for the Sound, let him keepe himſelfe on the weſt ſide of the faire waie, when he is a league or two a weather of Leſou, upon thoſe foreſaid flattes, of four, fiue, ſixe and ſeuen fathome, when as that he beginneth to come within a league or two of Anout, there it will be again deeper, but uneuen, the one caſt at leaſt a fathome more or leſſe then the other. when that you ſhall begin to get that uneuen ground of ſixteene, twentie, and alſo thirtie fathom, then is Anout yet about three leagues ſouth from you; comming neare Anout it will be verie uneuen, at one time thirtie, and then ſoone againe fifteene, ſeuenteene, and alſo twentie fathome.

If you will ſaile towards Leſou with a ſouthvveſt winde, comming about the riffe of Anout from the ſouthwardes, then goe not on more weſterly then northvveſt. If you goe on more vveſterly, eyther vveſtnorthvveſt, or northvveſt and by vveſt, then you ſhall come ſoone upon the Flatte, betvvixt Anout and Leſou, and ſhall finde firſt tenne, and then by little and little ſix, fiue and four fathome. When that vvith the northvveſt vvaie you beginne to gette Leſou in ſight, then it lyeth high, that is, the vveſt ende aboute vveſtnorthvveſt, and the northeaſt ende, vvhere the riffe lyeth off, about northnorthweſt from you. When you come ſo neere to Leſou, that you can ſee the eaſt ende out of the toppe in cleare vveather, about northvveſt from you, there it is thirtie, tvvo and thirtie, and four and thirtie fathome deepe, that laſteth ſo long until that the foreſaid eaſt pointe be ſouthweſt from you, but vvhen that pointe is ſouthſouthvveſt from you, then you are right thwart or upon the pointe or ſhovvldeſt of the riffe, then you ſhall runne over there in three, four, or fiue fathome: vvhen that foreſaid point commeth to be ſouth and by vveſt from you, then you are paſt and cleare of the riffe.

Depths by Leſou.

Betvvixt Anoute and Waerſberghen in the farevvaie it is deepe one and tvventie, tvvo and tvventie, and three and tvventie fathome, betvvixt them lyeth alſo a banck of tenne, tvvelue, fourteene and ſixteene fathom. When the northermoſt high hill of Waerſbergen is northeaſt from you, then the pointe of Anoutes riffe is ſouthvveſt from you: but vvhen that hill is northeaſt and by eaſt from you, and that you be ſomevvhat nearer Norvvaie then the riffe, then you are upon that banck. When you come upon it by night, then goe on ſouth, or ſouth and by eaſt, according as the vvinde ſhal bee, & then you ſhall get againe deeper vvater. There lyeth yet another banck betvvixt the riffe of Anout &

Depths thwart of Anout.

Valckenburgh, vvhich lyeth alongſt unto Halandt, vvhich at ſome places is not deeper then eight fathome. When the pointe of the riffe is aboute ſouth and by eaſt, and the high land of Anoute is aboute ſouth and by vveſt from you four leagues, there lieth alſo a banck of fourteen or fifteene fathome.

Riffe of Anout. The riffe of Anout lyeth off from the north-eaſt point of Anout about eaſtnortheaſt a league and half into ſea, and at the end lieth drie aboue water, which is exceeding ſteepe and needle too. The north ſide (when you come from the northwardes or the weſtwardes) you may ſound, and runne alongſt by it, in ſeuenteene or eighteene fathome: but comming from the ſouthwards, you cannot (in no wiſe) come neare it by your lead, for on the ſouth ſide cloſe to the Riffe, it is thirtie, and fiue and thirtie fathome deepe.

Roade under Anouts riffe. On the north ſide of the riffe, you may anker at many places, in tenne, eleuen, twelue and thirteene fathome. When you ancker in eleuen twelue or thirteene fathome, ſo that the Fire-beacon be ſoutheaſt and by ſouth, and the high land of Anout, which is the weſt end, aboute ſouthweſt and by weſt from you, then lyeth the outermoſt end of the riffe eaſt & by north from you, there is verie good lying for eaſtſoutheaſt, ſoutheaſt, ſouth, and ſouthſouthweſt windes. When you ſet ſaile from thence, and are bound to the Sounde, then you may boldly without feare (either by night or darke weather) ſaile alongſt by the riffe in ſixteen, ſeuenteen or eighteene fathome, untill thwart of the ende, keeping in ſuch depth you can take no hurte of it. Comming by the ende, it is four and twentie and fiue and twentie fathome deepe, but when you come about the pointe, and beginne to goe on ſouthſoutheaſt, then you haue preſently cloſe to the riffe no grounde in thirtie and fiue and thirtie fathome. The Riffe of Anout and Col lye one from the other ſoutheaſt and northweſt about tenne leagues aſunder. In cleare weather you may eaſily ſee from belowe both Coll and Anout, when you are betwixt them both. For to ſaile from the riffe to the Sound with a weſt-ſouthweſt winde, you neede not ſaile on nearer vvith a ſhip that ſayleth wel, then ſouthſouth-eaſt, with that courſe you ſhal ſail farre enough a weather of Col. Comming neare the coaſt of Zealand, that you may ſound in fourteene, twelue, tenne and eight fathome deepe. Betwixt Anout and Zealand, in the farewaie it is eighteene and twentie fathome deepe. Betwixt Anout and Zealand fifteen and ſixteen fathom, but in the fare waie betwixt Anout and Coll, it is deepe twentie, one and twentie, two & twentie, and three and twentie fathome. To the ſouthwards or the weſtwardes of it, it is ſhowlder, to wete, nineteene, eighteene, and alſo wel fourteene, thirteene, and twelue fathome, according as you come to the weſtwards, but towardes Norwaie it is deeper, to wete, four and twentie, fiue and twentie, eight and twentie and alſo thirtie fathome, whereby you may perceiue whether you be neareſt the Norwaie ſide to the eaſtwardes of the farevvaie or to the weſtwards.

Depths betvvixt Anout riffe and the Sound.

Diuers bancks. About northweſt from Col four leagues, and ſoutheaſt and by eaſt from Anout, there lyeth a banck of nine tenne and twelue fathome.

About eaſt and by ſouth from Anout, ſo far that you cannot well ſee it from beneath, but may ſee it out of the top, and northweſt from Coll, there lyeth alſo a banck of ſixteene fathome, groſſe ſand ground, as if it were ground of the riffe.

Louſe grounds. South and by eaſt about eight leagues from the point of Anout riffe, ſoutheaſt and by ſouth from the ſouth ende of Anout, and weſt and by north from Coll about fiue leagues, lye the Lowſegroundes, upon which is no more then eight foot water. He that commeth off from Anout riffe, being bound for the Sound, and goeth not more ſoutherly then ſouthſoutheaſt, ſhall not ſaile vvithin theſe grounds, but with a ſouth & by eaſt courſe he ſhould fall with them. He that cometh out of the Sound being bound towards Anout, ſhould (with a weſtnorthweſt courſe off from the Sound) alſo ſaile within the ſame, therefore he that is bound with a bare winde from Anout to the Sound, or from the Sound to Anout, muſt be carefull thereof.

Haſelin. The Iland Haſelin lieth from Anouts riffe ſouth tenne leagues diſtant, and from Coll ſouthweſt and by vveſt eight leagues, vvhich is on the north ſide or outer ſide verie foule, full of riffes and ſhoulds, but on the ſouth ſide or inner ſide towards Zeelandt it is indifferent clean, ſo that you may vvell haue roade there. From the eaſt ende of Haſelin lieth off a Riffe northnortheaſt and northeaſt and by north tovvardes Norvvaie three leagues into ſea, untill vvithin a league near to the Lowſegrounds: he that muſt turne to vvindevvardes here, vvith ſoutherlie or northerlie vvindes, and runneth ſomevvhat far over vveſtvvardes into the bay, muſt be verie carefull, and take heede thereof, becauſe it is thereabouts verie uneuen of depths, & uneuen grounds, and therefore you cannot vvell come neare them by your lead; but the Coaſt of Zealand you may come neare in ſix or ſeuen fathom by your lead.

Depths in the Scawe reach. If it ſhould happen that you muſt lye by, in the Scavve reach in long darke nights or miſtie vveather, then obſerue theſe directions following: If you be betvvixt the Scavve and Leſou, then you may keepe your ſelf vvell bouldly to the ſouthvvards or vveſtvvards, but uſe the lead much: about the Helmes and the Scavve you

may

may come neare the ſhoare into ten, tvvelue or fifteene fathome, before you need to caſt about. If you be by your reckoning thwarte of Leſou, you may come neare it in ten or fifteen fathom: But if you be betvvixt Leſou and Anout, there you may runne upon the flatts in fiue, ſix, ſeuen, eight or tenne fathome. If you be betvvixt Anout Haſelin and Coll, there you may runne to the ſouth ſhoare in fifteene and ſixteene fathome, but betvvixt Haſelin and Zealand in ten or tvvelue fathome.

It is beſt in anie vviſe to keepe you rather to the ſouth ſhoare, then to the Norvvaie ſide, but you muſt be verie careful of your lead, and uſe it verie much.

The ſetting and courſe of the ſtreames in theſe farewaies.

IN the Scavve reach, betvvixt Maelſtrand & Waerſberghen the ſtreame goeth moſt ſtill vvith the winde, and it rippleth there ſometimes in ſome places, as if there were ſhoulds, this you may finde in calme weather, if you let a lead ſinke to the ground.

By the Scawe the ſtreame commeth moſt commonly falling out at the Belt towardes the land of Northeaſt, eſpecially when the winde hath blown a while out of the eaſt or northeaſt, and runneth alongſt by Norwaie to the northwardes.

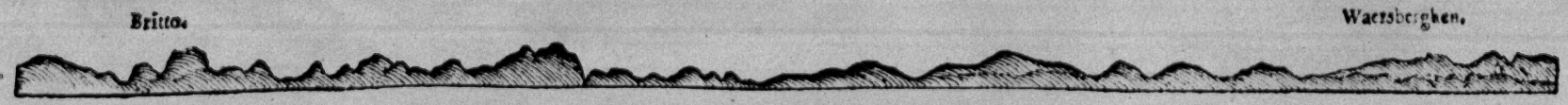
Men comming off from Anout, that will ſaile by night with a weſterlie winde, towardes the Scawe: or comming from the weſtwardes about the Scaw, with a ſoutherlie winde, being bound for the Sound, might ſone be carried with this current under Norwaie, a good whiles before they ſhould thinke or feare of it. Of this current read further in the ſixth chapter of the firſt booke.

In this faire waie betwixt the Scawe and the Sound, and then from the Sound untill aboute Faſterborne, it is exceeding neceſſarie, that a Pilot (or he to whom the charge is committed) be verie carefull in looking out, and be verie vigilant, that he may avoide the multitude of daungers, of ſhouldes and riffes lying there: the skilfulleſt and beſt experienced of all hath there enough to doe.

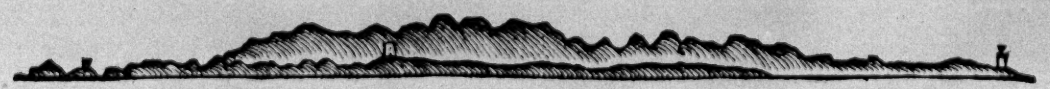
How theſe places are diſtant one from the other.

FRom the vveſt ende of the Paternoſters to the Maelſtrand the courſe is eaſtnortheaſt — — 2 leagues.
From Maelſtrand to Winneu ſoutheaſt 5 leag.
From Winneu to Maelſound ſouthſoutheaſt about — — 2 leagues.
From Maelſound to Waersbergen ſouthſoutheaſt — — 5 leagues.
From Waerſbergen to Tuylo ſoutheaſt 5 leag.
From Tuylo to Laholme ſoutheaſt and by eaſt — — 5 leagues.
From Laholme to the pointe of Turko behinde Swedereur the courſe is weſtſouthweſt — — 3 leagues.
From Turcko to Enghelholme ſ. e. 4 leagues.
From Engelholme to Coll weſt 4 great leagues.
From Maelſtrand to Nyding ſ.ſ.e. 8 or 9 leagues
From Malſound to Niding the courſe is ſouthweſt and ſouthweſt and by weſt a league and an half.
From Nyding to Waerſberghen ſoutheaſt about — — 5 leagues.
From Waerſberghen to Coll ſouth and by eaſt — — 12 leagues.
From the ſouth ende of Swedero to Coll ſouthweſt — — 4 leagues.
From the Riffe of the Scaw to Maelſtrand eaſtnortheaſt — 13 leagues.
From the Riffe of the Scaw to Nydingh ſoutheaſt and by ſouth — 16 leagues.
From the Riffe of the Scawe to Waerſberghen eaſtſoutheaſt — 23 leagues.
From the Riffe of the Scawe to Coll alongſt without the Trindle ſouth 30 leagues.
From the Riffe of the Scawe to Leſou ſouthſoutheaſt — — 8 leagues.
From the riffe of the Scawe to the Trindel due ſoutheaſt — — 8 leagues.
From the Trindel to Anouts riffe ſoutheaſt, or as ſome will ſaie ſomewhat more ſoutherlye — — — 9 or 10 leagues.
From Anoutes riffe to Coll it is right ſoutheaſt — — 10 leagues.
From Anouts riffe to Haſelin ſouth 10 leagues.
From Coll to Haſelin ſouthweſt and by weſt — — — 8 leagues.
From Coll to the northermoſt out-pointe of Zeeland ſouthweſt — 5 leagues.

Howv theſe lands doe shevv themſelues at ſea.



Thus ſheweth the land betwixt Maelſtrand and Waersberghen.



Thus ſheweth the Land of Waersberghen, when you ſaile alongſt by it, from Anout into the Sound.

Thus ſheweth Anout, when you ſaile off from Leſou.

Thus ſheweth Leſou when you ſaile from the Scawe towardes it.

CHAP.

T L A N D T T E

Landskroon

Raa

Wieshuyt

Krapröp

Kol

Swynehoeden

De Sondt.

Ween

t'Slot Kroonenburch

Elfeneur

Lappesandt

Het Bosch

Caarte der Schoonse en Zeelandsche Kust tusschen Kol en Valsterbon.

Z E E

Haselin

Roskildi fiogrd

Ysenfiord

Nicopen

SCHONEN

LAND

Elbogen oste Malmuÿen

Drelborgh

Schoner oste oude Valsterbon

Valsterbon

Noortstiet

Southolm

Vißcher

Middel gronde

ton op Casper Kaniel

ton op Draker

Zuyd vliet

Draker

Coppenha ven.

Staden

Kiöyck

Roskild

(Duytsche mylen 15 in een graadt.

Spaansche mylen 17½ in een graadt.

Engelsche en Fr. mylen 20 in een graadt.

14

Hafelin.

Roſkild
ſound.

Ilenvoer

Lapperi

CHAP. IIII.

How men shall sail from Col into the Sound, and then through the Shoulder, untill they come about Falsterborn.

FRom Coll to the Iland Haselin it is southwest and by west eight leagues, you may saile through betwixt Haselin and Zealand, untill you come into the Belt: the Coaste of Zealand is a faire strand, but somewhat to the westwardes of Haselin there shooteth off a riffe to seawards, which you must avoide. Haselin.

About eastsoutheast from Haselin goeth into the land a great broade Sound, which without at the entrance of it, is a greate league broade, there is good anckering for a northeast winde in fiue or sixe fathome. This Sound devideth it selfe within the land into three parts, the first or the eastermost called Roskildifiourd, goeth up southsoutheast unto Roskild, the second called Isenvoert lieth into the land south, and south and by west at least fiue or six leagues, unto Isickby and Holbeck: within it is at least two leagues broade, and in the middest lyeth a great Iland. The third lieth to Draecksholme also at least fiue leagues southwest and northeast, like the coast towards the Belt. The Coast of Sealand betwixt Haselin and the Sound is a cleane coast, you may saile alongst by the land in six or seuen fathom, but come no nearer to it by night then twelue or thirteene fathome, for at some places it is steep, & shouldeth up sodenly. Wher that litle new church standeth, thwart of it it is flat three and four fathome, & to the westwards of that wood which standeth to the westwards of Lapsand, you may come in four fathome by the shoare, without taking hurt, but comming neare Lapsand, you must keepe further off from the shoare, in seuen or eight fathome, or els you should gette behinde the pointe of Lappe sand. Roskildifiourd. Isenvoert. Lappesand.

Lappesand lieth about an Englisn mile to the northwards of Elsenoore, or the Castle of the Sound, lying on the west side of the faire waie, alongst the Coaste of Sealand. For to avoyde Lappesand you must be carefull of these marks, there standeth a house to the westwards of the Kings mill, to the westwardes of the Castle of Cronenburgh, keep the Chimney of that house to the westwards of the front of the Kings mil, and then you can take no hurte of Lappesand, then runne alongst by it in six, seuen, or eight fathome, so long untill that the east ende of the Iland Ween, cometh a little without the castle of the Sound, keepe that so standing, and saile so in sixe or seuen fathom, somewhat close alongst by the castle: you may plainly see lying through the water all that can hurt you.

If you will shift roads out of the Sound, and ancker behinde Lappesand, then saile thwart of the foresaid Kings house, called the Caux or Kings mill, so that it doe stande about south or south and by west, or south & by east from you, ancker there in six, seuen or eight fathom, there it is good lying out of the current and sandground: but if you wil anker in twelue, thirteen or fourteene fathome, there it is soft ground, & there goeth a strong current with southerly or southeast windes, but you lye there better, in more roome, for to saile inwardes againe, if it should happen that the winde did sodenly shift out to the northwest. It happened once to one of my acquaintance, that he had anckered somewhat to the eastwards of the Kings-mille, in sixe or seuen fathome, and the winde did shift in the night to the northwest, when they weighed their ancker the shippe fel towards the land, and before they could get the ship about before the winde, they did runne in three fathom over the pointe of Lappesand. For to ancker beside Lappesand.

From Coll to Elsenure or the Sounde the course is southeast, and southeast and by south four or fiue leagues. About halfe vvaies betwixt Coll and Elsenburgh lye the Swyneboeden, which are some foule rocks, and suncken rockes, which lye of to seawards a good vvaies from the land, But vvhen you saile tovvardes the Sound comming from Col, then keep the Iland Ween hidden behinde the Castle Cronenburgh, and then you cannot sail foul of the foresaid Swyneboden, when that you reckon that you are past them, then runne in amidst the channell, for to avoide Lappesand, or els if you bring the east ende of Ween then again right vvithout the castle, or keepe in seuen or eight fathome from the Sealands side, you cannot take hurte of Lappesand. When you are come vvithin the castle, you may ancker where you please. The shippes doe commonly ancker all alongst by the land, untill to the southwards of Elsenure, there it is fifteene and sixteene fathome deepe, but with a southeast vvinde it is badde lying there. Swineboden. For to avoid Lapsand.

Towardes the Iland Ween lyeth a banck of eight or nine fathom it is better lying there, but it is somewhat farre from the land.

When you wil sail out of the Sound towards Coll, and are come to the ende of Lappesand, then goe northwest and by west for to avoide the Swyneboden, untill that Coll be northnortheast from you, then goe boldly northwest and by north, or northnorthwest, according as the vvinde shall be, for with a northeast vvinde, you must runne out northnorthwest, verie close alongst For to saile out of the Sound.

alongſt by Coll, for to ſail a weather of the riffes of Anout and Leſou.

For to ſaile to Elleboghe or Malmuyen, and Landſcroone.

IF you vvil ſail out of the Sound to Elboghe or Malmuyen, goe from Ween ſoutheaſt & ſoutheaſt and by ſouth, and then you ſhall ſee the ſteeple or the towne lying before you, ſaile towards it, in that farevvaie, it is moſt ſeuen or eight fathome deepe: vvhen you come within the Southolmes, it vvil be fiue or ſixe fathom deep, it doth ſhoulde up ſodenly, from the ſeuen fathome to fiue, but before the tovvne it is ſhovvlder vvater, you may anker there in three, four or fiue fathome if you vvill; you may lye alſo at the ende of the Head, in three fathome, there it is good lying, but vvith a northvveſt vvinde it is a bad roade, for it blovveth there open in.

Northvliet. If you vvill runne out againe to the southvvards of the Southolmes tovvards Faſterborne or Steden, you muſt take heede of the Southolmes, vvhich are foule round about. From the north ende ſhooteth off a riffe a great waies: Vpon the eaſt ſide, at the ſouth ende, it lyeth verie farre off ſhoulde, there lyeth alſo the Northvliet, that is a ledge of rocks under vvater, but you may perceiue it through the vvater, you ſhall leaue it on the Southolmes ſide, to vvete, on the ſtarboard ſide of you: but the Southvliet, vvhich lyeth thvvart of old Falſterborne, Southvliet. you ſhall leaue on the larboard ſide, & ſo runne through betwixt them, it is in that faire waie at the ſhouldeſt four fathome deep. When you come off from Malmuyen, and that the ſteeple of Coppenhauen come to the ſouth ende of the Southolmes, then you are paſt the Northvliet. When you ſaile thus here through, you muſt be verie carefull to avoide theſe foreſaid groundes. You may runne out alſo alongſt by the ſtrand of Schoonen, and leaue both the Northvliet and Southvliet lying on the ſtarboard ſide: you may ſound that ſtrand in four and fiue fathome, as alſo the Riffe of Faſterborne.

Landſcrone. He that will ſail into Landſcrone, muſt know that there lieth a ſhowlde before the hauens mouth, and muſt runne in aboute to the ſouthwardes of it: there ſtandeth a litle church on the north ſide, by the water ſide, and a Gentlemans houſe ſomewhat farther within the land, bring that church over the houſe, and then you are cleare of the ſhould, then ſaile in right with the point, and ancker in three fathome.

Hulwater. To the northwards of old Faſterborne goeth in a deepe, called Hull or Hulwater, it is a deepe hauen for ordinarie ſhips, which goeth in moſt northeaſt in three or four fathome; you may ſounde it in alongſt by the footſtrand of old Faſterborne in three fathome, leaving old Faſterborne on the ſtarboard ſide, it is there large and broade enough.

How men ſhall ſaile out of the Sound, through the Shoulds or grounds, and into the Reefſholl.

HE that will ſaile out of the Sounde towardes the Showldes or Groundes let him goe on ſouth and by eaſt, or hee may ſound alongſt by the wood, in fiue or ſixe fathome, and then he ſhall not ſaile miſſe of the Norther buye for it lyeth in fiue or ſix fathom, Norther. on the north ende of the Middle grounds, to the eaſtwardes of the buye it is ſeuen fathome deep, but in the right farewaie thwarte of this buye it is nine or tenne fathome deepe: the markes of this buye are, when that ende of the wood is weſtſouthweſt from you, then you are thwarte of the norther buye, and there ſtandeth then a flat ſteeple, a prettie waies to the ſouthwards of that wood: there cometh alſo three hommocks to the north ſide of the town, theſe are all marks of the norther buye.

From the Norther buye to the Middle buye the courſe is ſouth and by eaſt. When you come Middle. by the Middle buye, then cometh the ſouthermoſt mill on to the ſouthwardes of the towne of Coppenhauen, and the flat ſteeple commeth within a handſpikes length unto the ſharpe ſteeple, that are the markes of the Middle buye, or ſecond buye in the Showldes or grounds, it is there eight and nine fathome deepe.

From the Middle buy to the third, & ſo forth Third in. to the buye upon Caſper Caniel, the courſe is ſouth and by eaſt. When the white caſtle cometh over the ſharpe ſteeple, that are the markes of the fourth buye, or the buye upon the Caſmer Caniell, the third lyeth at the ſouth ende of the Middle ground, it is not there verie broade, but ſteepe on both ſides, the Deepe thereaboutes is ſeuen or eight fathome: If you muſt turne to windewards there, you muſt caſt about, ſo ſoone as it doth beginne to ſhowlde, as wel on the one ſide as on the other.

The fourth buye lyeth on the north ende of Draecker, upon the flat, over againſte it lyeth a Buye upon Caſper Caniel. roc aboue water, called the Fiſher, eaſt and by north frō the buy, there you may wel ſound the Southolm, for it is there ſhowlde water. Be- Fisher. twixt the third and this fourth buye commeth running out a chanel from Copenhauen, which men doe call Caſmer Caniel, or the Kings deep.

From the fourth buye or Caſper Caniell to Draker riffe the courſe is ſouth, and ſouth and by eaſt: the land of Draecker you may ſound in three, four, or four fathom and an half.

The Riffe of Draecker lyeth a good waies without

Riff of Draker. without Draker, it lyeth off a halfe league east into sea. The markes of the buye upon Draker riff are these. When the steeple of Copenhaven cometh to the southwards of Draker to the wood, then you are thwart of the buye. The showldest water that you shall finde betwixt this buye upon Draker riffe, and the forsaid fourth buye, is 5 fathom lesse two foot. For to saile by night through the showlds, or Grounds, go from the Iland Ween south and south and by west, so long until that you come thwart of the point of the wood in foure fathom, then keep somwhat off from the shore, and go on southeast and by east vntil that you come in 7 fathom, and then forth southsoutheast untill you be over the Middle Ground, the first or northermost buye, as is before said, lyeth in fiue or sixe fathom, but you may well goe over to the westwards of it, in three or foure fathom, keepe then somewhat off untill that you come in eight, nine or ten and eleven fathom, and sail then on south unto Casper Caniel, there it will be by little and little showlder, to wit, about 8 fathom. Thwart of Draker it is uneven for to sound, the one cast fiue, and the other foure fathom, but go your course, except you knew that you were neerer the one shore of Draker, or the Southolmes, then the other. Without Draker it will bee againe 6 and 7 fathom deep.

For to saile into Rifsholl or Coopenhaven coming frō the northwards out of the Sound, run alongst somewhat to the westwardes of the Norther buye, for to avoyd the plate, or Middle ground which lyeth to the westwards of he buyes in the Showlds, which upon the north end is not deeper then 12 foote, and on the south end eight, nine, and at some places ten foot deep, all hard stony & rocky ground, keepe the sounding of the shore on the west side in two, three, or foure fathom, so deep as you please, untill you come before Coopenhaven, on that side you can take no hurt, it is there broad and wide, and lyeth in south and by west; in the middest betwixt the shore and the the middle ground, it is 5, 6, and 7 fathom deep. If you should turn to windwards there, then come not neerer the Middle ground then in foure fathom, but the west shore you may run to by your lead, as neer as you please.

From the north end of the Iland Draker runneth off a riff to the northwards, vpon the point of that riff lyeth a buye which men doe call the buye in the Reefsholl, leaue that on the larboard side, and run in untill you come before the towne, and ancker there. If you come from the southwards, and will saile unto Reefsholl, then run alongst to the eastwardes of the foresaid fourth buye (which men doe call the buye upon Casper kaniell) then loose up presently about by it, and go on n.w. into the kings deep, unto the buye in Reefsholl, which lye one from the other due northwest, and southeast: you shall then also see right out a head, in the northwest within the land a flat steeple right over a great house or Hospitall that standeth close upon the sea side, keep them so one in the other, and saile right in with them, and so you shall run in right amidst the chanell, it is there in the fareway fiue, sixe, seven, and eight fathom deepe. This Kings deepe is somewhat uneven of ground, therefore be carefull in using of the lead, and come not too neere the north side, that is the Middle ground, which is very foule and rocky: from the south shore (about halfe wayes betwixt the two foresaid buyes) it lyeth off somwhat showld, so that you shall haue at one cast fiue or sixe, and the other but three fathom.

Buye in the Reefsholl. When you come by the buye in the Reefsholl, which lyeth upon the point of the norther riff of Draker, leaue that on the larboard side, & run on south about by it, unto Copenhaven. The markes of this buye are these: there lyeth a round hommock or great rock about half a league within the land, when that is right east from you, then it cometh right with a flat steeple which stands about a league within the land, then you are even thwart of the buye, or point of the foresaid riffe. These marks will serue at times when the buye lieth not there. A little to the northwards of that buye lye the great ships which tarry for wind in 5 or 6 fathom, there is good anker ground.

Kuyck. From the buye upon Draker riff unto Kuyck the course is s.w. fiue great leagues, but unto the rif of Fasterborn, or Steden, it is south and south & by west 5 leagues, in the fareway betwixt Draker and Fasterborn it is 6, 7, and 8 fathom deep, but between Fasterborne and Steden, 10, or 12, & 13 fathom, but by Steden deepest.

Road under Steeden. Vnder Steden you may ancker as well to the southwards of it, for northerly, as to the northwards for southerly windes. If you will anker for northerly winds, then run in betwixt Steden & Meun, a good wayes into the bay, so that the steep point of Steden lye about northnortheast from you, ancker there in eight or nine fathom, and you shall lye land-lockt for north and northwest winds.

But if you will anker for south or southwest winde, then ancker to the northwardes of Steeden, so that the southeast poynt be south and by east, or southsoutheast, and the northwest point northwest or w.n.w. frō you,

there it is good lying in ſeven fathom, the ground is there ſmall white and black ſand. If you wil ſet ſaile from thence to the ſhowlds or grounds, then go not more northerly then northeaſt, ſo long untill that you come by the riffe of Draker, then run about by it in fiue fathom.

To the northwards of Steeden the coaſt of Zeeland goeth in with a great bay into Kuyck, it is there all to the weſtwards ſhowld water of fiue, ſixe and ſeven fathom, and good ancker ground, ſo that you may anker every where thereabouts.

Markes of the riffe of Falterborne.

The riffe of Faſterborne lieth off ſouthweſt to Seawards a league and a halfe. It is a fowle ſtony and rocky riffe, upon the end of it lyeth a buye in foure fathom, you may run about by it upon your lead in fiue fathom with ſmall or ſhips of litle draughts. Men doe hold for a mark of this riffe, that when the ſteeple of Faſterborn and the caſtle come one in the other, that then they are thwart of the poynt of the riffe. He that cometh from the northwards, and will ſaile about Faſterborne with a northerly or northeaſt wind, and that he will come ſomewhat neere about the riffe, and cometh in fiue or ſixe fathom, he muſt be very quick in uſing the lead. When old Faſterborne church cometh halfe wayes to the caſtle and the church of Falſterborne, then beginneth to come the worſt and ſhowldeſt of the riff, that laſteth until that old Falſterborn church cometh to the eaſtwards of the houſes of Falſterborne, before that you are not paſt the riffe. If you ſhould luffe up ſooner about by it, you ſhould run in great danger with a ſhip of great draught, you ſhall haue (coming againſt the riffe) the one caſt foure or fiue and then preſently three fathom upon it, all hard ſtony ground. Therefore it is beſt with a ſhip that draweth 12 or 14 foote, to come no neerer this riffe then in 6 or 7 fathom.

If (when you come from the eaſtwardes) you will ſaile about Faſterborne, and come alongſt the ſhore with a northeaſt wind in ſixe or ſeven fathom, and Falſterborne is about north, or northnortheaſt from you, then it ſhowldeth up very faſt in two fathom, or two fathom and a halfe. Therfore keepe you further off from the ſhore in 10 or 12 fathom, ſo long untill that the Caſtle bee northeaſt, or n.e. & by north from you, or that old Falſterborne church come half way to the caſtle of Falſterborn & Falſterborn church, then you cannot ſaile upon the riff from the eaſtwards, but running about by it in fiue fathom, then you muſt be very carefull in vſing your lead. But if you will come neere the riff in 4 or 5 fathom, when old Falſterbborn church commeth to the eaſt end of Falſterborn, you ſhall run in great danger for to come on ground. When you come within the riffe, you may run alongſt by the coaſt of Schoonen in 4 fathom without taking hurt.

Of the ſtreames on theſe coaſts.

THrough the Sound and the ſhowlds or grounds, the ſtreame runneth commonly with the winde, but the moſt part of the time to the northwards, before the cōming of a hard eaſt wind, or when it hath blown out of the eaſt, thē the ſtream rúnnes ſtil out to the northwards.

Courſes and diſtances.

FRom Coll to Elſeneure the courſe is ſoutheaſt, and ſoutheaſt & by ſouth 4 or 5 leagues
Frō Lapſand to Ween ſouthſouthеaſt 3 leagues
Fro Elſeneure to the northеr buye in the ſhowlds or grounds, ſouth and by eaſt 6 leagues
Frō Elſeneur to Landſcroon eaſtſoutheaſt 4 leagues
From Ween to Malmuyen ſ.e. and ſ.e. and byſo uth 6 leagues
From Malmuyen to Reefſholme weſt 5 leagues
From Malmuyen to Steden ſouthſouthweſt 8 leagues
From the buye upon Draker riff to Kuyk ſ.w. 5 great leagues
From the buye upon Draker riffe to Steden, the courſe is ſouth and by weſt 5 great leagues.
From the buye upon Draker riffe to the buye upon Falſterbornes riffe, the courſe is ſouth fiue leagues.

Zeecaarte van't Noor der deel van de Belt

Kal
Helms
Cheltud
Grimste
Rangsont
Grimsondt
Kaagshoed
Orunthuy
Moriacker
Randersen
Aelburger
Swetering
Stevens hoofd
Steertschrunch
Kalgront
Groote Helm
Haters Riff
Landloose gronden
Syro
Haselin

Hals
Laeclou
Zeebuy
Schagen
Cleyne Hobnen
Graspolm
Dee
Helpis
Duuelgronden
Lesou
Frindel
wetering
Anout
15
Duytsche mijlen 15 in een graadt
Spaansche mijlen 17½ in een graadt
Engelsche en Franssche mijlen 20 in een graadt

CHAPT. V.

For to saile from the Scawv into the Belt.

FRom the Scaw to Seabuye the course is south and by west sixe leagues, there it is upon the road four and siue fathom deep. Betwixt the Scaw and Seabuye lye the small Helmes foure leagues from the Scaw, and two leagues to the northwards of Seabuye. When you will saile into the Belt, you must leaue them on the starbord side, going on still south and by west untill thwart of Seabuy, you may also saile through betwixt the Helmes and the main land unto Seabuye, if you will, there is at the showldest betwixt them, three fathom water, but about a seaboard the Helmes, betwixt the Helmes and the north end of Lesou, it is foure leagues broad, and in the chanel ten fathom deep soft ground.

The lying of the Helmes, and how men shall come to ancker there, and also of all depths, showlds, and dwale grounds, betwixt the Helmes, the Scaw, and Lesow, together with the description of the Iland Lesou, and the riffes that lye out there about it, is described in the third chapter of this book.

Betwixt Lesou and Seabuy lie many dwale grounds, which are very uneven of three, foure, siue and sixe fathom, the like uneven and showld grounds lye also within or to the southwards of Seabuy, of foure, siue, and sixe fathom, but the right chanel through betwixt the dwale grounds of Lesou, and the showlds of Seabuy is seven and eight fathom deep.

To the southwards of the small Helms and Seabuy, neerer to the maine land then Lesou, lye also some uneven dwale grounds, upon which there is no more water then ten, eleven, and at some places twelue foot. Hee that draweth but eight or nine foot need not feare of them.

For to saile into Aelburgher deep.

From Seabuy to Aelburgher deepe, the course is south and by west seven leagues, upon the north side of the haven standeth a flat steeple called Hals, in the havens mouth lieth a buye, & upon the southland stand two capes, which you must bring one in the other, by them you shall finde the buye, the chanell lyeth in first west and by south, about a cables length, then you must run up northwest and west right unto Hals, and run in by the north shore, vntill thwart of Hals, from the south point of the land shooteth off a flat which you must avoid: being thwart of Hals, you must goe southwest and by west unto the bight, & in the crooked chanell you must shun the north shore somwhat, and then againe n.w. and by west alongst by the north side, unto the second crooked, and then southsouthwest, and afterwards westsouthwest unto the town, in the comming in by the buye, it is two fathom. But for to sail in there, it is best to take a Pilot. By the south shore goeth in also a little deepe of sixe and seven foot.

The towne Aelburgh lyeth up in the land foure leagues within the river. Also there lyeth alongst this coast to the westwards some banks, there you must shunne the land somewhat.

When you sail from the Helms to Stevenshead, through betwixt the dwale grounds and the flat of Seabuy, you shall meet with a showld ground about half wayes betwixt Stevenshead and Seabuy of 5, 6, and 7 fathom. This showld is called the Sweteringh, & lieth about 3 leagues eastwards from Aelburgh deep, the chanell there betwixt them is about 10 or 11 fathom deep. *The Sweteringh.*

From Aelburgh deep to Haselin, the course is southeast and by east about 20 leagues.

From Aelburgh deep to Stevenshead the course is southeast and by south about nine leagues. There betwixt them the land lyeth in a great Bay, wherein lye the two little townes Mariacker and Randersen: Mariacker lyeth from Aelburgh deep south & south and by west 4 leagues, and from Stevenshead siue leagues. Betwixt Mariacker and Stevenshead lieth the River of Randersen, which runneth up crooked farre into the land, unto the the litle town Scandelburgh. *Stevenshead.* *Mariacker.* *Randersen.*

From Stevenshead to Haselyn the course is eastsoutheast 13 leagues. Haselyn is on the the outer side full of showlds, riffes, and grounds. A larger description of Haselin and Anout, as also of all the fowle grounds and showlds, lying thereabouts, you shall finde in the third chapter of this book. *Haselin.*

A little to the southwards of Stevenshead lyeth a little town called Oruntbuy, there lye the Chalck-grounds right before the river of Grimsound in a bay a little about the poynt of Stevenshead: thatis a sand of two or three foot water, but not far off it, it is ten fathom deepe, you may sound them in foure fathom. You may sayle up into Grimsound, unto Grimstee, that is a lading-place for Huyes. *Oruntbuy Chalck grounds.*

From Stevenshead unto the great Helme the course is southsouthwest about sixe leagues. The land lies from Stevenshead unto the point of Ebeltud southsouthwest seven *Great Helm.*

or eight leagues. Ebeltud is a little Towne lying within the land thwart of the great Helme. Betwixt the great Helme and Iutland it is ſixe and ſeven fathom deepe. Cloſe by Stevenſhead, and the point of Ebeltud it is eight, nine, and alſo tenne fathom deepe. The great Helme hath two Riffes, one upon the northeaſt ſide, and the other upon the ſouthweſt ſide.

From Stevenſhead to Siero the courſe is ſouthſoutheaſt eight leagues, to the northwards of Siero lyeth a ground looſe from the land, divided into two riffes, which men muſt avoid. Theſe two Riffes lye at ſome places aboue water.

From the ſoutheaſt poynt of Siero lyeth off a riffe towards Ruſnes, there you may ankor behind it.

Courſes and Diſtances.

From the Scaw to Leſou ſouthſoutheaſt
— — 8 leagues
From the Scaw to the Small Helmes ſouth and by weſt 4 leagues
From the Scaw to Seabuy ſouth and by weſt
— — — 6 leagues
From the Helmes to Seabuy 2 leagues
From Seabuy to Aelburgher-deep ſouth and by weſt 7 leagues
From Aelburgh deep to Mariacker ſouth and ſouth and by weſt 4 leagues
From Aelburgh-deep to Stevenſhead ſouth-eaſt and by ſouth 9 leagues
From Aelburgh-deepe to Haſelin ſoutheaſt and by eaſt 20 leagues
From Stevenſhead to Haſelin eaſtſoutheaſt 13 leagues
From Stevenſhead to the great Helme ſouth-ſouthweſt, and ſouth and by weſt about
— — 6 leagues
From Stevenſhead to the poynt of Ebeltud ſouthſouthweſt 7 or 8 leagues
From Stevenſhead to Syro ſouthſoutheaſt
— — 8 leagues

For

Kiidingen
Hadderſlen
Sont
Milbaer
Milbaer
Karſgard
Apentrade
Eens
Orgard
Toreu
Tandorp
Adelf
Eckt
Flenſborgh
Nordborg
Alſen
Odenſee
De Roen
Aſcens
Lauſapel
Sonderborg
Sonderborg
FVINEN
Reins hooft
Wiborg
Rudoſter
Kalgrunt
Munck
I. Knol
Nubel
Perda rif
Tarop
Vldorp
Nyborg
Caplen
Slorie
Swynborg
Gudtus
Oſdorp
Koping
Knutshooft
Ar
Obms
Tyßing
De friſſel
Lange
landt
Kntkopeng
Stons
Caßuer
Obms
Arus
Wedero
Schoul
ſoer
Golber
ſondt
Maſcou
Lalandt

IVTLANDT

Horsens

Weel

Alu

Aerhuysen

Kal

Welder Sont

Swaen grunt

Hilbaar Sont

Endelan

Tons

Ebelo

Bowens

Ebeltud

Vlhuy

Samso

Noorby

Odense foert

Samps

Kyholm

Grote helm

Funesthoft

Carremund

Wero

Landegaard

Boltsack

Romps

Haier Rif

Rosnes

Syro

Limbose gronden

ZEE

Rif

Rodens

Nicopen

Kallen borgh

LANDT

Paſcaarte vant Zuijderdeel vande Belt.

Duytſche mijlen 15 voor een graad

1 2 3 4 5 6 7 8 9

Engelſche en Franſche mijlen 20 in een graad

1 2 3 4 5 6 7 8 9 10 11 12

Spaenſche mijlen 17½ in een graad

1 2 3 4 5 6 7 8 9

16

CHAPT. VI.

For to saile through the Belt from Syro vntill past Langheland.

FRom the great Helme unto the Iland Wero, the course is n.n.w. & s. s. w. foure leagues distant, there it is 4 and 5 fathom deep. From Wero there runneth off a showld unto Kyholm, and about Kyholme: and also about the litle Iland Samps, it is also full of showld grounds, which run off unto the great Iland Sampso.

Kyholme. Samps.

Sampso. From the great Helm unto the Iland Sampso it is s w. and n.e. foure or fiue leagues.

From the north end of the Iland Sampso there shooteth off a little riffe north into the sea, you must sound close about by it for to come into the road of Sampso, when you will anker there. It is there in the road ten fathom deep, and you shall be there under the Swan-grounds sheltred for all winds.

Aerhuysen. From the south end of Ebeltud to Aerhuysen the course is west and by north, & w.n.w. 5 leagues. It is there all showld water of 2 & 3 fathom deep. He that will anker in the roade before Aerhuysen, let him bring the great steeple in the midst betwixt the two other sharp steeples, there is the best ground, & good road in 3, 4, or 5 fathom, so should as you wil. To the southwards of Aerhuysen goeth in the Wederfound Wederfound betwixt Iutland and Sampso: he that will sail in there, must be well acquainted, for it is there all full of Riffes & showlds. You may not also use that fareway by night, by reason of all the sands & shoulds, and also by day you must be very carefull and circumspect in looking out, and not spare your lead, but you may anker and haue road there every where.

For to saile through the Wederfound When you wil sail through the Wederfound, coming off from the great Helme or Ebeltud, you must leaue the Iland Tuns & the Swan-grounds on the larboard side, running all along by the Iuttish coast in 2 or 3 fathom, untill past Horsens, or the Iland Endelau, which you may not saile to, nor come neer from the westwards by reason of all the grounds which ly before it on the west side. It is a narrow chanell betwixt Endelaw & the main land, lying from the Wederfound through the Swan-grounds south, it is on both sides showld, and but a creek for to saile through.

Swanne-grounds.

When you come off from the Melversound and will saile throughthe Wedersound, it is best to runne alongst by the Iuttish side untill thwart of the river of Horsens, then you must edge somwhat off there from the land, & saile right with the Iland Tons, and so you runne through betwixt the Norther and Souther grounds, leaving the Iland Tons on the starboard side. When you are then past Tons, you shall run out close by the north point of Samso, towards the land of Ebeltud, it is altogether one course from Horsens to Tons, and forth to Sampso, and the point of Ebeltud, to wit, n.e. and s.w. eight or nine leagues.

From Horsens, or that Iland Endelau unto the Melversound, the course is s.s. w. 6 or 7 leagues. The Melversound is a deep sound of 20 and 25 fathom, very crooked to come into, it goeth in betwixt Fuynen and Iutland, which are both high lands. From the Iland Ebelo unto Melversound the course is s.w. and southwest and by south fiue great leagues.

Melver-sound.

From the road of Sampso to Ebelo the course is s.s.w. and s.w. and by south 5 leagues. From the south end of Sampso to Ebelo the course is s.w. and by west foure leagues.

Ebelo.

From Sampso to Roems the course is s. e. & n.w. 5 leagues. The n.w. coast of Fuynen lyeth s.w. and by west eight leagues. The little Iland Ebelo lyeth off a league from the same, right before Bowens, but you cannot saile through betwixt the Iland and Fuynen. To the southwards of the Iland lyeth a great rock under water, betwixt this rock and the Iland is the road before Bowens in 8 & 9 fathom.

Roems.

Road before Bowens.

Betwixt Syro and Wero lieth a dangerous riff long & broad, lying further then half way to Syro. When you will run through betwixt the two foresaid Ilands a wether of Russenes, you must leaue at least the two third parts of the water on the side of Wero, and go in s.s.w. towards Roemps, which is 9 leagues distant.

The foresaid riff is called Haters riff, which is on the east side very hard and stony, he that cometh off from Boltsack, he shall run close to the Iland Wero, for to avoid that riffe, the chanell betwixt the riff and Wero is not very broad, and 3 fathom, or 3 fathom and a halfe deep. He that cometh from Roems or Rusnes, and will saile through VVero sound, let him bring the great Helm to the east side of VVero, and keep them so standing sailing on so right with them, he shall (so doing) take no hurt of Haters riff. Betwixt Syro & Haters riff and somwhat more southwardly, the ground is very uneven of 5, 6, 7, 8 & 9 fathom. On the south side of Haters riffe it is good anckering for northerly winds in 6 and 7 fathom.

Haters riffe.

Rusnes and Syro lye n.n.e. and s.s.w. about foure leagues asunder.

From the point of Rosnes runneth off a little riff to seawards, but to the eastwardes of it betwixt Rusnes and Haselyn, lyeth off a riffe at least two eagues into sea, which lyeth drye

at the end, & by it, it is very ſteep, cloſe along by the end it is 8 fathom deep.

From Ruſnes to Syro it is ſouth and north 8 or 9 leagues. Betwixt Roſnes and Syro lyeth Callenburgh, which is alſo a lade place, and about 2 leagues to the ſouthwards of Callenburgh lyeth a flat alongſt the coaſt about a league from the ſhore of 5 fathom depth. Callenburgh

From the eaſt end of Syro runneth off a litle riff or ledge of rocks, & over againſt it cometh alſo a flat ſhooting off from the land, betwixt them both it is 4 and 5 fathom deep. But behind or thwart of Syro lyeth Caſſeur, a faire haven, where men do lye at the Kay, and let their goods be carried into the ſhip. Caſſuer.

From Spro to Langeland the courſe is ſ.e. and by ſouth 4 leagues diſtant. He that commeth alongſt to the eaſtwards of Wero, thorough the chanell betwixt Wero and Haters riff, and will ſaile to Roems, let him go on due ſouth and by eaſt, and then he ſhal run alongſt about an Engliſh mile to the eaſtwards of the Boltſack, and fall with the land a little to the eaſtwards of Roems: likewiſe hee that goeth from Roems, or a litle to the eaſtwards of it, on north and by weſt, he ſhal fall betwixt Wero and Haters riff right in the fareway. Betwixt Roems and Fuynen you may run thorough in two fathom, but with great ſhips you cannot go through there.

From the north end of Fuynen ſhooteth off a litle riff about an Engliſh mile into ſea. About a league eaſt and by north from Roems lyeth a ſhowld of 3, 4, and 5 fathom, which is ſteep, and ſhowldeth up ſo ſuddenly, that a man not knowing of it, and finding it ſo by the lead, ſhowld be affrighted at it. To the ſouthwards of Roems in the land of Fuynen lyeth a litle town for to lade called Cartemonde. The haven goeth in from the eaſtwards, and it is ſhowld on the weſt ſide, there lye no buyes in the havens mouth, there is no more water then 5, 6, or ſomtimes 7 foot. Cartemonde

From Roems to Spro, or Knuytshead, the courſe is ſouth & by eaſt, and ſ.ſ.e. 5 leagues. Betwixt Spro and Knuytshead it is 12 and 13 fathom deep. But betwixt Roems and Spro it is 10 and 11 fathom deep. Spro.

Even about to the ſouthwards of the point of Knuyts-head in Fuynen lyeth the haven of Nyburgh, when you are about the point, you run right up to the towne, about northweſt, a league, there it is 6 and 7 fathom deep, Men do lye there with ſhips to the Kay, & let their goods be carried in what they will. Nyburgh.

From Knuytshead to Langeland the courſe is ſoutheaſt 4 leagues, & then you leane Spro lying on the larboard ſide. From the ſ.w. end of Spro ſhooteth off a little riff which you muſt avoid. At the north end of Langeland lye the litle Ilands of the Friſſell, which are round about very fowl. From Knuyts head to the Iland Taſſing the courſe is ſouth 4 leagues and then you leaue the Friſſell lying on the larboard ſide, & run through betwixt the Friſſell and Fuynen. If you be bound to Swineburgh, then go from the Friſſell to the ſ.e end of Fuynen, on ſ.ſ.w. and you ſhall meet a litle Iland which you may runne about on both ſides of it, through betwixt Taſſing and that litle Iland, or you may run alongſt by the land of Fuynen vntill that you come to the little town of Swinburgh, which lyeth over againſt the Iland of Taſſing. Over againſt the point of Fuynen lieth a litle Iland caled Olms, then you muſt go up to the weſtwards. You may alſo run about on the other ſide of Taſſing, and leaue the Iland Arr with the fowle grounds (which lye betwixt Arr and the ſoutheaſt end of Fuynen) on the larbord ſide of you, it is no deeper upon theſe grounds then 6 foot. Now when as that you ſhall come by the litle Iland Olms, or by the ſ. e. point of Fuynen, then you muſt (as before is ſaid) goe up to the weſtwards about the point of Fuynen towards Woburgh. Vpon the ſouth ſide of theſe foreſaid grounds goeth alſo a Deep through, weſt, and weſt and by ſouth through betwixt the grounds and the Iland Arr: upon this Iland Arr lyeth a little towne called Kopingh. This fowle ground is 3 leagues long, and that Iland Arr is alſo 3 leagues long, they lye both of them eaſt and weſt, and the Munk Iland lyeth at the end of theſe grounds before Woburgh in Fuynen, which hath two riffes, the one shooteth off from the ſoutheaſt end eaſt into ſea, the other frō the north point northeaſt into the ſea. When you ſaile through to the northwards of theſe grounds, to wit, betwixt Fuynen & theſe grounds, towards Woburgh, you ſhall alſo meet with the foreſaid Munk, with another litle Iland or two more, leaue them lying on the larboard ſide, and run all along by the land of Fuynen, about weſt & weſt and by north, unto the point of Askens, which is about fiue leagues diſtant from the ſoutheaſt poynt. The Friſſell. Swinburgh. Olmes. Kopingh. Iland Munk. Askens.

From the eaſt point of Askens unto the litle Ilands Toreu and Areu, the courſe is weſt and by north, and weſtnorthweſt two leagues, theſe two litle Ilands lye one over againſt the other, the one on the ſide of Iutland, and the other on the ſide of Fuynen, men runne thorough there betwixt 2 riffs which run off one againſt the other, it is there 4 & 5 fathō deep. Litle Iland Areu and Toreu.

To the northwards or weſtwards of Areu yeth

lyeth the Sound of Hadderſleu, which lieth in about weſt & by ſouth, upon it lieth the town Hadderſleu two leagues within the land.

Sound of Hadderſleu.

From Areu or Toreu to Melverſound the courſe is n.n.w. fiue leagues, which you muſt run into from the ſouthwards firſt weſtwards unto the Sound of Coldingen, being a broad Sound, which goeth a league into the land, if you will goe through the Melverſound, you muſt leaue it on the larboard ſide, & goe up to the eaſtwards unto the town of Melver, wher you come then again into a crooked chanell. The Melverſound goeth out to the northwards with a very crooked chanell, and then you come out again upon the broad water to the northwardes of Fuynen, as is beforeſayd.

Sound of Coldinghen.

Apenrade.

You may alſo ſail off frō Areu into the ſound of Aelſem alongſt ſ.ſ.w. unto Apenrade, and then about behind the Iland of Aelſēns until you come into the ſound of Flensburgh.

The Melverſound and the litle Iland Areu lie ſ.ſ.e. and n.n.w. one from the other.

The Roen.

To ſaile out of the Aelſen ſound from Areu or the Melverſound, then goe from Areu or Toreu unto the Roen eaſt & by ſouth ½ leag. & then through betwixt the Iland & Fuynen, that is alongſt to the northwards of Roen, for you cannot go about to the ſouthwards of it. The Roen is a bad & ſhowld riff ſhooting off from Alſen, wherunto it is faſt, the outer end of it lieth dry like Anoutriff. From the Roen to Arr or Kopingh the courſe is ſoutheaſt and by eaſt fiue leagues.

Poles riffe.

From the ſ.e. end of Aelſt ſhooteth off a great riffe towards Arr called the Poles riffe: you muſt run through betwixt Arr & that riff, leaving two third parts of the water on the Alſen ſide, and one third part towards Arr, & run on ſo with the ſouth end of Langheland, untill that you come againſt Copen.

From Arr to the ſouth end of Langeland the courſe is ſ.e. and by eaſt, and e.ſ.e. foure leagues. And from the Poles riffe to the ſouth end of Langheland, the courſe is weſt and by ſouth ſixe leagues. You may run through betwixt Langheland and Arr to the northwards & come out again into the Belt by Nyburgh: from the ſouth end of Langeland to Taſſing, it is north & by weſt 6 leagues: you may ſail about Taſſing on both ſides, and leaue Arr & the foul grounds, lyingon the one ſide of you. Vpon theſe grounds it is but 6 foot deep.

Taſſing.

You may alſo ſail through betwixt the foreſaid grounds & Fuynen into the ſound of Aelſen, unto the litle Ilands of Areu and Toreu, as hath been ſaid here before.

The Sound of Apenrade

From the litle Iland Areu to Apenrade the courſe is ſ.ſ.w. fiue leagues. The ſound of Apenrade is a broad open ſound, upon which lieth the foreſaid town of Apenrade.

From the river of Apenrade unto the crooked chanell of Sonderburgh, which goeth in betwixt the Iland Aelſen and the main land, the courſe is eaſt 3 leagues, there you may ſail through about behind the Iland of Aelſen to Sonderburg, and then forth into the ſound of Flensburg. It is very narrow & crooked betwixt the Iland and the main land, but when you are come through the narrow and crooked channell into the ſound of Flensburgh, there it is broader and larger.

Sound of Flensburgh.

The ſound of Flensburgh goeth in betwixt Sonderburgh and Holſterland, being a broad ſound. He that will ſail in there, muſt take very good heed of the Holſters ſide, when you begin to come betwixt the two lands, and run in alongſt by the land of Aelſt, for from Nubell or Holſterland lye off the Chalck-grounds half wayes the deep. This ſound lyeth in weſt and by ſouth untill that you come before the river. There lyeth in the rivers mouth a litle Iland on the ſtarboard ſide, you muſt run in to the eaſtwards of it, and goe in weſt and by ſouth, and weſt untill you come within the crooked chanell of the River or Sound, and then you muſt goe up againe ſ.w. then you ſhall ſee the town of Flensburgh lie before you.

Chalck-grounds.

How theſe foreſaid places doe lye diſtant one from the other.

From the great Helm to Wero ſouthſouth-eaſt 4 leagues
From the great Helme to Sampſo ſouthweſt 4 leagues
From the ſouth end of Ebeltud to Aerhuyſen weſt and by north and w.n.w. 5 leagues
From the rode of Sampſo to Ebelo ſ.ſ.w. and ſouth and by weſt 5 leagues.
From the ſouth end of Sampſo to the Iland Ebelo the courſe is ſ.w. 4 leagues
The n.w. coaſt of Fuynen lieth ſouthweſt and by weſt 8 leagues
From Ebelo to Melverſound ſ.w. 5 leagues
From Endelau to Melverſound ſ. ſ.w. ſomewhat ſoutherly 6 leagues
From Sampſo to Roems ſ.e. 5 leagues
From Syro to Roſnes ſ.ſ.w. 4 leagues
From by weſt Syro to Roems ſ.ſ.w. and ſouth and by weſt 9 leagues
From Wero to Bultſack ſ.ſ.w. 4 great leagues
From Wero to Romps ſouth & by eaſt 8 leag.
From Romps to Knuytſhead ſouth and by eaſt and ſouthſoutheaſt 5 leagues
From Knuytſhead to Langeland ſ.e. 4 leagues
From Knuytſhead to the Iland Taſſing ſouth 4 leagues

From

From the southeast end of Fuynen to the east point of Askens, west & west and by north 5 leagues
From the point of Askens to the litle Ilands of Areu and Toren, west and by north and westnorthwest 2 leagues
From Areu to Melversound n.n.w. 5 leagues
From the point of Rusnes in Zeeland to the Iland Syro south 8 or 9 leagues
From Rusnes to Casseur s.s.e. 9 or 10 leagues
From Spro to Langheland s.e & by s. 4 leag.
From the north end of Langheland to the south end south 8 leagues
From the south end of Langheland to the Iland Arr the course is northwest & by west somwhat westerly 4 leagues
From the Iland Arr or Kopingh to the Roen, the course is n.w. and by west. 5 leagues
From the Roen to the litle Iland Areu west and by north 3 leagues
From Areu to Apenrade s.s.w. 5 leagues
From the river of Apenrade to the Strait of Sonderburgh east 3 leagues
From Sonderburgh to the Sley southeast and by east 4 leagues
From the south end of Langheland to Femeren the course is s.e. & by east 7 or 8 leag.

CHAP. VII.

The description of the coasts of Holsten, Mekelenburgh, and the southermost Ilands of Denmark from the Belt unto the Ielle and Fasterborne.

TO the southwards of the Sound of Flensburgh, lye yet three Sounds or rivers, where great ships may goe into, to wit the Sley, Nylhofvoert, and the Sound of Kiel, the land lyeth off from Flensburgh to Kiel southsoutheast or somewhat more easterly sixe leagues.

The Sleye. From Sonderburgh to the Sley the course is southeast and by east 4 leagues, that is, a broad deepe sound lying in first about west, and when you are within it, then it runneth in about southwest and by west past Sleeswyke, there also come out many great ships. The town Gottorpe lyeth also upon this river.

Nylhofvoert Betwixt the Sleye and Kiel lyeth Nylhofvoert, upon it lyeth a litle towne called Eeckelenfoort.

Kiel The sound of Kiel is a broad Sound which lyeth in about southwest, there you may go in also with great ships. From Kiel to the west end of Femeren it is east and by north about eight leagues.

Femeren. From the Poles riff to Femeren (over the Coelbergher Heyd) the course is e.s.e. 13 or 14 leagues, but from the south end of Langeland unto Femeren it is s.e. and by east 7 or 8 leagues. The chanel betwixt Femeren & Laland is 5 and 6 fathom deepe, you may saile round about Femeren, there it is all showld ground. Betwixt Femeren and Holsterland, you may run through in 8 or 10 foot, there lyeth a litle town called Heyligherhaven where you may anker with ships of small draughts for to lade wheat or barley. From the Iland Femeren to Geester riff the course is east and by north ten leagues. But from Femeren to the Trave of Lubeck s.s.w. ten leagues: there goeth in a good Deep for great shippes, it is deep upon the bank 12 foot water.

Heiligher haven.

There is also a great bay and a good haven, where men may lye safe for all winds, except the northeast & northnortheast winds. From the Trave of Lubeck to Gester riff the course is northeast and southwest about ninetine leagues.

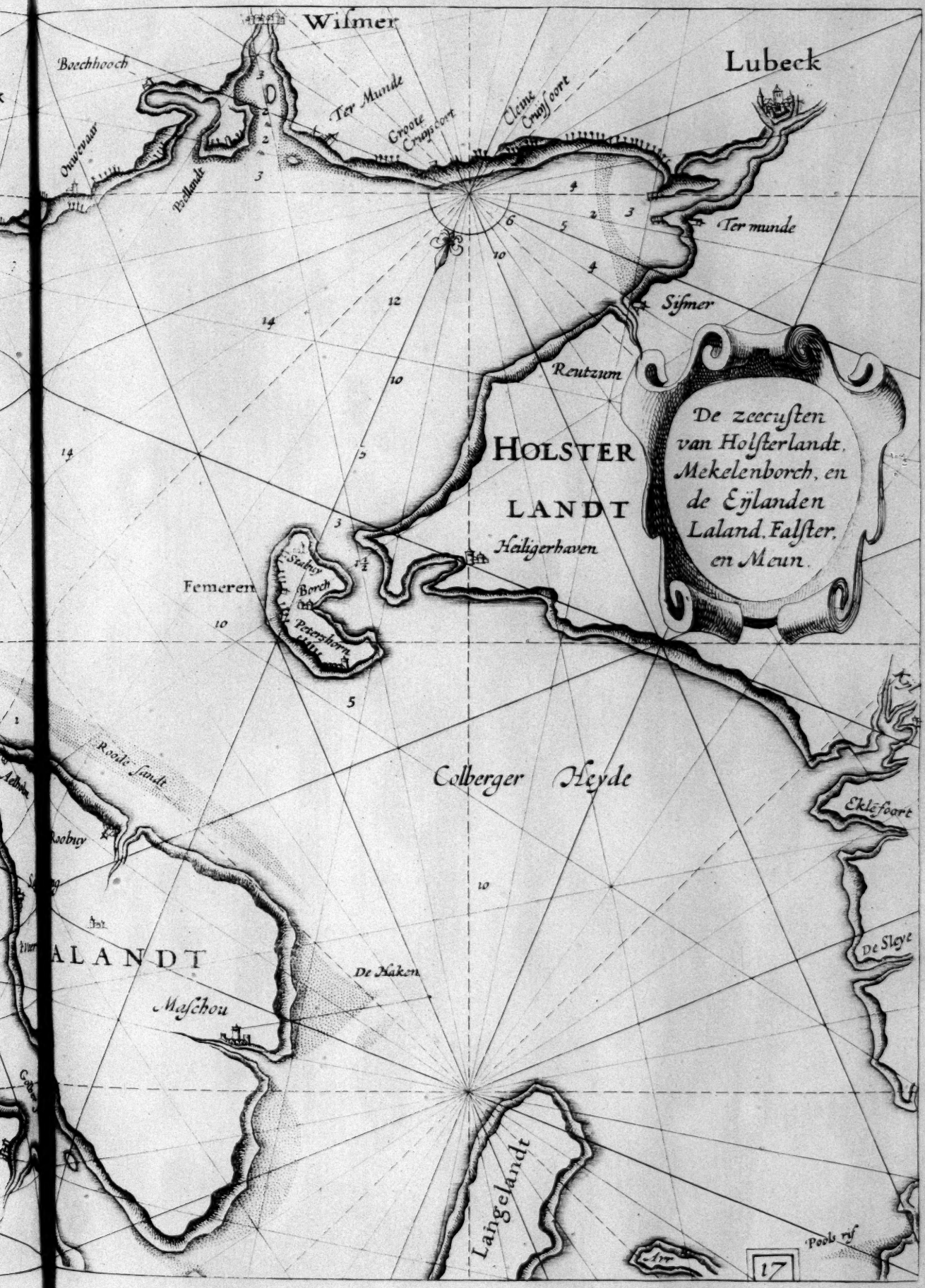
From the Trave of Lubeck to Wismer-deep the course is first northeast and by east, and then eastnortheast, there goeth in a faire deep for all sorts of ships..

Deepe of Wismer. For to saile in at the deep of Wismer, bring the steeple upon the south land south frō you, and saile so in untill that the steeple standing upon the eastland, by that eastermost house, cometh to the 5 or 6 houses, by these houses stand some trees together, from that eastland runneth off a little riffe, lying off northwest & by north from it, when the steeple cometh to those houses, then goe in s.s.e. in that deepe is twelue foote water. In the Summer there lye two buyes in the havens mouth, the one upon the taile of the sand that shooteth off from the eastland, and the other vpon the showld ground, you must run in betwixt thē. This deepe of Wismer lyeth from Femeren south and by east distant about seven or eight leagues, but from Wismer to Gester riffe the course is northnortheast twelue or thirteene leagues.

Rostick. About south from Geester riffe lyeth Rostick, there goeth in also a good deepe of ten foot, it is there very flat, you may sound it in on both sides with the sounding poll. Wismer and Rostick lye about 8 or 9 leagues asunder.

Some-

Duytſche mijlen 15 voor een graad.
Engelſche en Franſche mijlē 20 in een graad.
Spaanſche mijlen 17½ in een graad.
Straalſunde
Roſtick
Rugen
Bart
Darsser munde
Robbenis
Hiddensoe
Bout
Geſter
Geſter Riſ
Grabersonde
Aldsbn
De Tolck
Nicopeng
Staubekopeng
Falſter
Groensonde
Meun
Stech
't Vier
Curſant
't Wolvē gat
Werdenborgh
Neſtvelt
Steden
ZEELANDT
Valſterbon


Wilmer
Lubeck
Boechhooch
Ter Munde
Groote Cruysdoort
Cleine Cruysdoort
Ouwerwar
Pellandt
Ter munde
Sifmer
Reutzum
De zeecuſten van Holſterlandt, Mekelenborch, en de Eylanden Laland, Falſter, en Meun.
HOLSTER
LANDT
Heiligerhaven
Femeren
Stulpy
Borch
Petersborn
Colberger Heyde
Roode ſandt
Roobuy
Eckleſoort
De Sleye
ALANDT
De Haken
Maſchou
Langelandt
Pools rif
17

Robbeneſſe. Somewhat to the eaſtwards of Roſtick lieth a high land called Robbeneſſe, from it ſhooteth off a great riffe or ſhoulde to ſeavvards, tovvards Geſter riffe, it is betvvixt Geſter riffe and that ſhoulde not deeper then tvvelue or thirteene fathome. If you come neareſt to Geſter riffe, then it doth ſhoulde up ſoddenly, but if you come neareſt this ſhoulde, then it ſhouldeth by little and little. Geſter riffe, as hath been before ſaid is a ſhould riffe, & runeth off at leaſt three leagues into ſea.

Barts. A litle to the eaſtwards of this forſaid ſhould lyeth Baerts, there goeth in a deepe of ſix foote, at the weſt pointe goeth off a Riffe, which men muſt avoide.

The Ielle. Three or four leagues to the eaſtwardes of Barts goeth in the Ielle, there men doe goe in to Meſound, or Straelſound, there is no more then ſixe foot water. In the Ielle lye three buyes, which you muſt leaue all on the ſtarboard ſide, being paſt them eaſtwards, up unto the beacon upon the Iell, you muſt loofe up about by it, and ſaile to the middle plate, which you muſt leaue alſo on the ſtarboard ſide, and then ſouth & by eaſt unto Straelſound. Within the mouth of the deep, it is twelue and fourteene foot deep.

Golverſound The Iland Langheland is about eight leagues long, & lyeth ſouth and north, to the eaſtwards over againſt it lyeth the Golverſound, lying in to the northwards of Laland, al alongſt up unto Neſtvelt and Wordenborgh and commeth into the Greenſound, and into the Wolvegat, and ſo again into the Eaſt ſea: Before the Golverſound lye three litle Ilands, the one at the point of Laland, which is called Wedero, and is alſe faſt to it with a rif, ſo that men cannot ſail through there betwixt them; to the northwards of it men do runne into the Golverſound, leaving that Iland on the ſtarboard ſide: the other two lye to the northwards of the foreſaid Iland of Wedero, the one is called Arnis, and the other Ooms. Ooms is a litle plaine Iland, but Arnis is the greateſt, which lieth neareſt to Zealand, & is full of trees. From the Iland Ooms, lieth off a riffe ſouthweſt to ſeawards, which is a great league long, and upon the end flatte, which men may runne over by the lead. When you will ſail into the Golverſound you muſt leaue theſe two Ilands lying on the larboard ſide. The Iland Laland hath upon the weſt point over againſt the ſouth ende of Langeland, a riffe or Hooke, lying off from Laland at leaſt half waies over the Belt: for to avoide that, you muſt runne alongſt within an Engliſh mile to the eaſtwards of Langeland; or when that you leaue the two third partes of the water on Lalands ſide, and the other third part on the ſide of Langheland, you ſhall not come too neare it. When you come from the ſouthwards, & are bound into the Belt, and that then the ſteeple of Maſcou, which ſtandeth upon Laland commeth to ſtand northeaſt and by eaſt from you, then you are paſt that riffe, and lyeth to the ſouthwardes of you: It is here in this channell betwixt Laland and the ſouth ende of Langheland, fiue, ſixe, and ſeuen fathom deep.

Wedero. Arnis. Ooms. Riffe on Laland.

From the ſouth ende of Langeland to Femeren the courſe is ſoutheaſt and ſoutheaſt and by eaſt diſtant ſeuen leagues.

Red ſand. When as you come off from Langeland and are paſt the riffe or Hooke of Laland, then the ſouth coaſt of Laland lieth eaſt & weſt: alongſt by it lyeth a ſand, which is called the Red-ſand, & lieth alongſt until before Golverſound, which runneth in betwixt Laland and Geſter.

Aelholme. To the northwards of this ſand is a rode of 14, 16, and 18 foot water, before the litle townes of Roobuye. Aelholm and Roobuy, where men do lade nuts and Barley.

Betwixt Laland and Geſter, thwarte of this Redde ſand (as hath been ſaid) runneth in the Golverſound, which men may run into, & come out again into the Belt, but in this ſound or chanel there is litle depth, there lyeth a ſtone banck within, thwart over the chanel. The litle town Nicoppen lyeth upon the Iland Falſter a league Nicoppen within Geſter. From Geſter ſhooteth off Geſter riffe. Geſter riffe at leaſt three leagues into ſea, which is a ſhoulde riffe.

Bout. To the eaſtwards of Geſter rif lyeth an Iland called Bout, it is there abouts al ſhoulde water, to wete, three and four fathome.

Greenſound. To the eaſtwards of Bout goeth in the Green ſound, by the litle towne Stuybekuype, & commeth out again into the Belt to the northwards of Laland: the Green ſound lieth in about weſt and weſt and by north in three fathome, there lieth a ſhould on the larboard ſide of the mouth of the Sound, called the Tolck, which men muſt Tolck. avoide: you muſt goe in to the eaſtwards of it, you may lead it in alongſt by the land of Meun, in fourteene or ſixteene foot, that foreſaid town Stuybekuype. Stuybekuype lyeth aboute a league within the mouth of the channell.

From Geſter rif to Meun the couſe is northnortheaſt eight leagues: but frō Bout to Meun it is northeaſt about ſeuen leagues.

Meun. From the Golverſound to Meun the land lyeth in a bay, you may ancker there for a northeaſt, north, northweſt and weſt winde, in fiue or ſix fathome. He that commeth out of the Sound, and is bound to the ſouthwardes of Meun, may come ſo near Meun as he will, and loofe up to the weſtwards by the point, and anker where he pleaſe, in fiue or ſix fathome. On the north ſide of Meun you may alſo ancker in 6 fathom, behind a litle riff that ſhooteth off frō the north point, for an eaſt, ſ.ſ.w. & weſt winde it is there all over flat, and good ground.

From Meun to Steden the courſe is northweſt and by north four leagues, betwixt them both goeth in the Wolffound or the Woluegat, that runneth paſt Werdenborgh and Neſtvelt through the Golverſound out into the Belt.

Meun and Faſterborne lye north and by eaſt, and ſouth and by weſt fiue leagues aſunder.

How theſe foreſaid lands do lye one from the other.

FRom the ſouth ende of Langeland to Femeren the courſe is ſoutheaſt and by eaſt — — — 7 or 8 leagues.
From the Pools-riffe lying on the Iland Aelſt to Femeren the courſe is e.ſ.e. 13 or 14 leagues.
From the Sleye to Kiel ſoutheaſt 4 leagues.
From Kiel to Femeren the courſe is eaſt and by north — 8 leagues.
From Femeren to the Traue of Lubeck ſouthſouthweſt — 9 or 10 leagues.
From the Traue of Lubeck to Wiſmer deep the courſe is firſt northeaſt and by north, & then eaſtnortheaſt in all — 9 leagues.
From Roſtick to Robbenes the courſe is northeaſt — — 5 leagues.
From Robbeneſſe to Doornboſch northeaſt and by eaſt — — 7 leagues.
From Femeren to Wiſmer-deepe ſouth and by eaſt — — 7 leagues.
From Femeren to Roſtick e.ſ.e. 8 or 9 leagues.
From Femeren to Geſter riffe eaſt and by north — — — 9 leagues.
From the Traue of Lubeck to Geſterriffe northeaſt — — 19 leagues.
From Wiſiner deep to Geſter riffe northnortheaſt — — 12 or 13 leagues.
From Roſtick to Geſter riffe the courſe is north — — 7 or 8 leagues
From Geſter riffe to Dorneboſch eaſt 9 leagues.
From Geſter to Meun northeaſt 7 leagues.
From Meun to Steden northweſt and by north — — — 4 leagues.
From Meun to Faſterborne north and by eaſt — — — 5 leagues.
From Meun to the buye upon Faſterborne riffe north — — 4 or 5 leagues.

How theſe lands doe ſhew themſelues at ſea.

When you ſaile to Lubeck alongſt betwixt the land of Cruyſoort and Holſterland, then it ſheweth it ſelf on both ſides thus.

Thus ſheweth the Coaſt of Mekelenburgh betwixt Cruyſoort and Dorneboſch, or the Iſelle, when you ſaile alongſt by it, a league without the land.

CHAPT.

Steden

Valsterboen

Drelborgh

Bleicker

Meun

De Zeecuſten beooſten Valſterbō, van Bornholm en 't Eylant Rugen

Doornbosch

Witmont

Iasmont

EYLANDT

RVGEN

L I E C K E R

Santhamer

Gogsbeer

Wystee

Eertholms

Slot

Sandwijck

Suanex

Bornholm

Rottum

Nex

Hasel

Hamer huys

Duytsche mylen 15 in een Graadt

Spaansche mylen 17½ in een Graadt

Eng. en Franse mylen 20 in een Graadt

CHAP. VIII.

A deſcription of the Coaſts betvvixt Faſterborne and Sandthamer, and the Ilandes Brontholme and Rugen.

HOw men ſhall ſail about the riffe of Faſterborn hath been here before rehearſed. The Coaſte from Faſterborn eaſtwards lieth moſt eaſt and by north, & eaſtnortheaſt. Firſt from Faſterborn to Elburgh are three leagues. Elburgh. If you wil ancker before Elburgh, then bring the Cloyſter and the church, within a fathome or a fathome and half near one to the other, and ſaile ſo right in unto the town, you may anker by it in four, three, or two fathome and a half.

From Elburgh to Wtſtede are ſeuen or eight leagues. Betwixt them both, about three leagues to the eaſtwards of Elburgh, and fiue leagues to the weſtwardes of Wtſtee is a pointe, off from Wtſtee. which lieth a ſhoulde, come no nearer it then eight or nine fathome. Wtſtee lyeth in a bight, and hath a high ſharp ſteeple. If you be bound thether, then bring the ſteeple north from you, & then ſail in right with it towards the ſtrand; there ſtandeth a red tiled houſe to the eaſtwards of the bridge, bring that houſe, and the ende of the bridge one in the other, and ſaile in ſo, and runne to the weſtwards of the bridge, and anker there in three fathome, or two foot leſſe, there is cleane ſand ground. When you come from the weſt, & are paſt that foreſaid ſhoulde, then you may boldly runne alongſt by the ſhoare in three fathome and an half, without feare.

Goesbeer. Three leagues to the eaſtwards of Wtſtee lyeth a high point called Goeſſebeer, from thence to Sandthamer is a league.

From the point of Goeſſebeer runneth off a greate ſhowlde farre to ſeawards, and lyeth alongſt the coaſte, unto neare Sandthamer, you Sandthamer. may ſound it in ſix, eight, and tenne fathome, as you will. When you runne over it in tenne fathome, then lyeth the north end of Brontholm about eaſt from you, and the pointe of Sandthamers northnorthweſt. Under the Sandthamers is good anckering for a weſt, weſtſouthweſt, weſtnorthvveſt, and northweſt winde, in fiue or ſix fathome. When you come out of the northeaſt, you may runne alongſt by this coaſt, with a northweſt winde, in ſeuen, eight, nine, or twelue fathome, untill paſt Goeſbeer, for to avoide Brontholme.

The point of Goeſbeer and the north end of Brontholme lye weſtnorthweſt and eaſtſoutheaſt about fiue leagues aſunder, but Wtſtee and the foreſaid northende of Brontholme weſt and by north, and eaſt and by ſouth eight leagues aſunder.

For to ſaile from Faſterborne aboute to the northwards of Brontholme you muſt go on eaſt ſo long, untill that you haue the length of Wtſtee, then forth eaſt and by north, and then you ſhal ſail yet neer enough to the point & ſhoulde of Goeſbeer, come no nearer it then ſeuen or eight fathome. But to ſaile from Faſterborn to the ſouthwards of Brontholm, the courſe is eaſt and by ſouth, two and twentie or three & twentie leagues, and alongſt the ſouth ſide of Brontholom eaſtſoutheaſt.

The Iland Bronthollom is clean roun l about except on the ſoutheaſt point, there runneth off a foule riffe, called Brewers rif, which men muſt avoide. On the northeaſt ſide you may runne alongſt by it upon your lead, without doing amiſſe, in twelue or thirteene fathom, & alongſt the ſouthweſt ſide in eight or nine fathome. Brontholme.

Men may ancker round about Bronthollom, at divers places, as before Rottum, and to the northwards, before the Caſtle, thwart of Sandtwick, Suaux, and Nex. Rode under Brontholm.

Before the Village, betvvixt Rottum, & the caſtle that ſtandeth upon the northweſt pointe, is good anckering for an eaſt or northeaſt winde, in thirteene, fourteene, and fifteene fathom, but not verie cleane ground. Rottum.

Thwarte of the Caſtle it is good lying for an eaſtnortheaſt, eaſt, and eaſtſouthеaſt winde in eighteene and tvventie, and alſo fourteene and fifteene fathome, ſand grounde, but nearer the ſhoare the ground is not verie cleane, the nearer to the ſhoare, the fouler ground.

Under the northweſt point before Santvvick there is good anckering for ſouthvveſt vvindes, and you may come neare unto that point. From the northweſt point to the other point the ſhoar lyeth eaſtſoutheaſt and vveſtnorthvveſt. Sandwick.

On the eaſt ſide is good anckering before Suaux & Nex: but before Nex it is not verie clean. By Nex runneth off a litle riffe from the ſhoare, vvhich is ſteepe on both ſides: but if you come no nearer it then in tenne fathome, you can take no hurte of it: to the northvvards of Nex lyeth alſo a great rock. He that vvil anker before Nex, let him anker ſo, that the flat ſteeple vvhich ſtandeth aboue Nex, doe ſtand betvvixt the vveſt & vveſt and by ſouth from him, and that the north pointe be north and and by vveſt, and the ſouth point be ſouthſouthvveſt from him, there it is tvvo and tvventie fathom deep, and cleane ſandground. At many other places it is othervviſe ſtonie and rough ground, vvith ſouthvveſt and vveſt vvindes you haue there a vvether ſhoare. Nex.

The Eertholmes lye from the north ende of Brontholm eaſt & by north & vveſt & by ſouth Eertholmes.

four leagues aſunder, & from the ſoutheaſt end ſouth and north fiue leagues. In the Eertholms is a little hauen, but by reaſon that it is not uſed it is unknowen.

Of the Iland Rugen.

For to ſaile out at the Ielle.

TO the weſtwardes of the Iland Rughen men do ſail up into the Ielle unto Straelſound. For to ſail from Straelſound out alongſt the Ielle, goe on north, and north & by weſt, there lyeth a Middle ground, ſometimes there ſtandeth a beacon upon it, and ſometimes not, leaue that on the larboard ſide, being paſt that, ſaile to the point where the wood ſtandeth upon, ſo that the town come behind the wood, you ſhall then ſee a verie high tree, bring that over the flateſt ſteeple, and keep it ſo a while ſtanding, going on ſtill north, and north and by weſt unto the beacon upon the Iell. When as you lofe up about by it weſt, then looke out for two trees, which ſtand upon the eaſt ſhoare, ſomewhat within the land, bring them a ſhips length without the higheſt tree, which ſtandeth upon the ſhoare, and loofe up about the beacon, towardes the buye. In the mouth of the deepe lye three buyes, which in ſayling out you muſt leaue all on the larboard ſide, but in ſayling in al on the ſtarboarde ſide. It is not deeper in the mouth of the Deepe then ſixe and ſeuen foote, and alſo without, it is farre off ſhoulde water.

The Iland Rugen hath four pointes that lye out, under which men may ride at divers places, as Doornboſch, Witmondt, Iaſmondt, and the Peert.

Dornboſch.

The pointe of Doorenboſch lyeth from the Ielle north and by weſt diſtant two leagues, it is high land with a ſteepe point, men may ride under it for northeaſt, eaſt, and ſoutheaſt windes. If you will ancker there, then ancker in three, four, or fiue fathome, ſo that the ſteepe pointe ſtand northnortheaſt from you, or that the church ſtand over the Point, or anker whereabout that it ſhall pleaſe you, or ſhall be beſt convenient, it is there al over ſhallow water & clean ſand ground.

From Dornboſch to Brontholme the courſe is northeaſt and by eaſt, ſeuenteene or eighteene leagues, but Dornboſch and Faſterbornes Riffe lye northnorthweſt and ſouthſoutheaſt fourteene leagues aſunder.

From Dornboſch to Witmondt the courſe is northeaſt & by eaſt four leagues. Betwixt them both goeth in a greate Bay, where you may run in alongſt by Witmondt, and haue rode there in fiue or ſix fathome, for ſouthweſt, ſouth, and alſo for an eaſt winde.

Roade under Witmondt.

If you will ſeeke roade under Witmondt for weſterlie windes, and runne about by the point comming from the weſtwardes, then come not nearer the pointe, then ſeuen or eight fathome, there ſhooteth off an uneuen ſhoulde, which you muſt avoide, being come about the point, ancker there in twelue, thirteene, or fourteene fathome, that is about a league from the ſhoare, nearer to the ſhoare in ſeuen, eight or tenne fathome the ground is not cleane, in twelue fathome you haue groſſe ſand, in thirteen or fourteene fathome ſoft ground, ſo that with harde windes you ſhould neede to ſhoe your anckers, you lye there alſo landlockt for a weſt and ſouth winde.

Roade at Iaſmondt.

Iaſmondt lyeth from Witmondt eaſtſouth-eaſt diſtant three leagues. If you will ancker under Iaſmondt, for a weſt or weſtnorthweſt wind, then ſaile ſo far about the point, that it come to be northnorthweſt, or ſomewhat more northerly from you, when you come about the pointe, you ſhal ſee in the ſouthweſt or ſomewhat more weſterlie from you, a little thick wood of trees, upon a plain hill, and on each ſide of that little wood, a litle ſharpe ſteeple, and alſo a great tree, like as if it were a mil without wings, when that tree commeth to be ſouthweſt & by weſt from you, anker there in nine, or tenne fathom, there is indifferent ground, according as the grounde is there, by the point of the land, it is about thirteene fathome deepe.

Or bring the north point northweſt, and the other point ſouthweſt and by ſouth from you, and anker there in tenne or eleuen fathom, there it is good ſoft ground, but it laſteth not long, ſo ſoone as you finde the ſoft ground you muſt let fall your anker, for the ground is there at manie places not cleane, or you muſt ſaile farre aboute both the points, there you lye landlockt for a northweſt and north winde, in tenne, eleuen or twelue fathome, good ſoft ground.

The Peert.

The Peert, which men doe alſo call the great Buck upon Iaſmondt, is a tuffe of trees or two, & is a point that lyeth out with two points, where is betwixt them both a faire Sandbay, where is good lying in four or fiue fathom clean ground.

Iaſmondt and the Peert lye ſouthſoutheaſt & northnorthweſt diſtant three leagues.

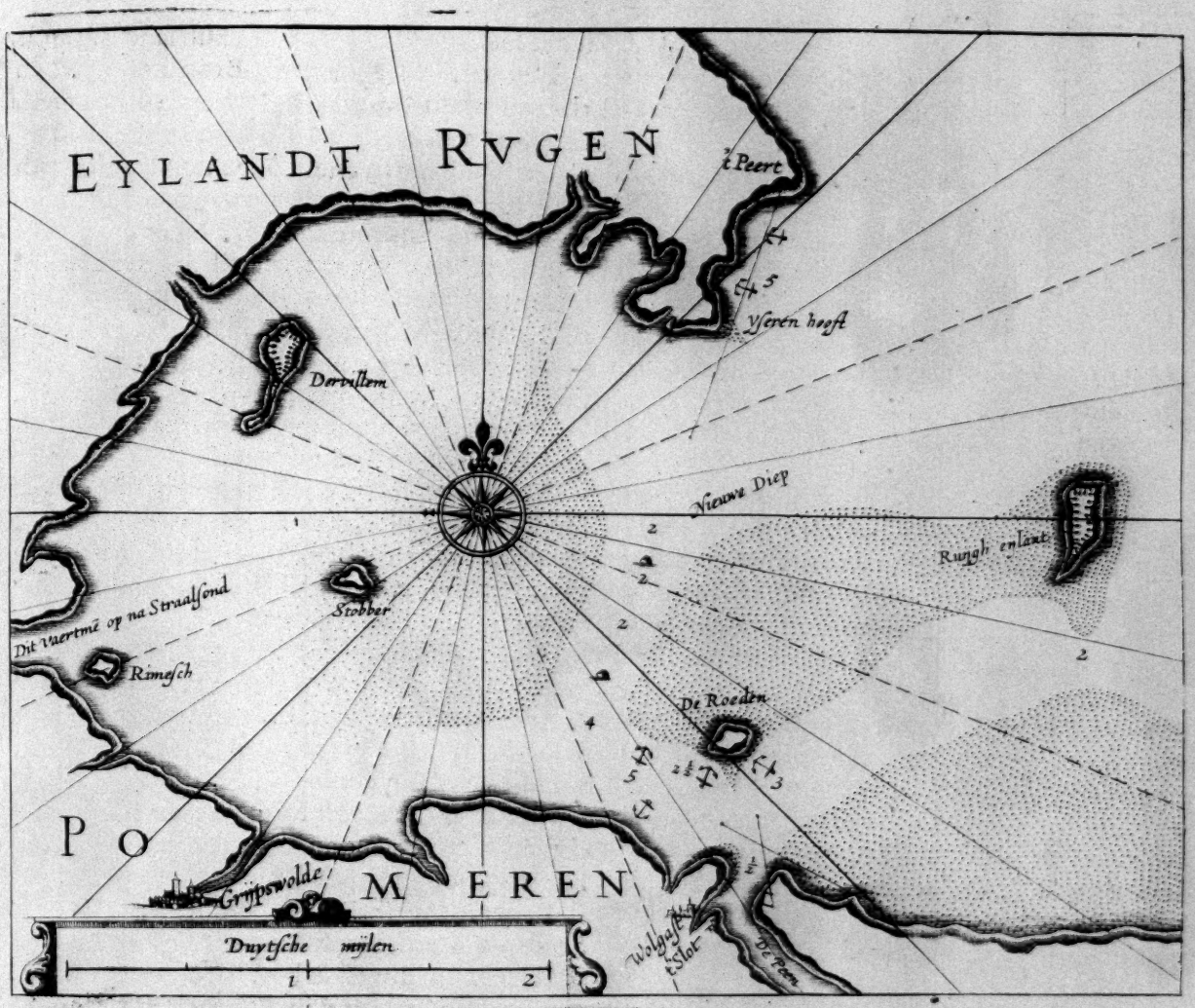
To the ſouthwards of the Peert goeth in that New deepe, where men doe ſaile through to Statyn.

For to ſaile into the New deepe.

Aboute a league ſouth, ſomewhat weſterlie from the Peert lyeth a pointe, called the Iron-head, there lyeth off a little riffe, therefore you muſt run alongſt ſomewhat without that point, and being a little paſt that point, you can ſee the outermoſt buye of the New deepe, wherein lye two buyes in the middeſt of the deepe, ſo that you may ſail alongſt on both ſides of the buyes, but with ſhippes of greate draughts you muſt run cloſe alongſt to the eaſtwards of the buyes, there

there is the verie deepeſt of the channel. By the outermoſt buye, it is at the ſhowldeſt, there is the barre, commonly there is eleuen foot water, or a little more then eleuen foot and a half, and ſometimes alſo well twelue foote, but in the middeſt of the mouth of the deep it is cõmonly ſtill twelue foote, and ſometimes more.

The Newe Deepe.



Vpon the Peert lie three high hommocks the weſtermoſt of them is the greateſt, one great round hõmock, when you keep that right without the Iron head, and then run on ſouthſouthweſt, then you cannot ſaile amiſſe, although there were no buyes in the mouth of the Deep.

When you come over the Barre, you ſhall finde againe four & fiue fathome depth, being a little over it, you muſt go on ſoutheaſt unto the entrance of the Peen, with that courſe you leaue
The Roeden. the Iland of the Roeden lying at leaſt two cables lengths on the larboard ſide, It is there all over good anckring.

If you will ſaile into the Peen you ſhall eſpie (ſayling thus) right out a head at the eaſt ſide of the Peen, two pointes, keepe the eaſtermoſt a handſpikes length without the weſtermoſt (for to avoide a ſtonie ſhoulde, which runneth off from the weſt point of the Peen) untill that you come before the Peen. Vpon the eaſt ſhoar ſtand two beacons, bring them one in the other, and run ſo into the Peen, which lyeth in firſt ſouthweſt: but in the comming in, there is no more then ſixe foote, or ſix foot and an half water.

If you wil anker under the Iland the Roeden, you muſt be mindful of a litle riffe, that lieth off from the Roeden to the ſouthwardes, towardes the maine land, ancker there, either to the weſtwardes or to the eaſtwardes of it, according as the winde ſhall be, in three fathome, or two fathome and a halfe, ſo ſhoulde or deepe, as you pleaſe, there is the common roade for the ſhips. Rode under the Roeden.

The Rough Iland lyeth from the Roeden northeaſt and by eaſt diſtant about two leagues. Rough Iland

About eaſtnortheaſt from the Roeden lyeth alſo a channel into the ſea, a little to the ſouthwardes of the Rough Iland, that is good for to runne out with weſterly windes, when you can not come out at the New deep, & alſo for thoſe that are bound to Danſke, or to the eaſtwardes. For to ſaile out to the eaſtwards of the Roeden.

From the Rough Iland lyeth off a little riffe to the ſouthwards, which you muſt avoid, & runne through betwixte that and the ſhoulde which runneth from the ſhoar, thwart of it is the barre or ſhouldeſt of this chanel not leſſe then eleuen or twelue foot water, that is a ſhort out-let, being over, you ſhall gette preſently deeper water. This chanel is Pilots water. Vpon the Iland the Roeden dwell Pilots, which doe bring out the ſhippes there. The Coaſt of Pomeren lieth from the New deepe to Colſbergen eaſt and weſt about ſixteene or ſeuenteen leagues.

Swin. Betwixt them both lye yet two channels, the Swinne, and the channel of Camin. The Swin lyeth ſeuen leagues eaſtwardes from the Newedeepe, which runneth through with a little River into the Haff or broade water, right over a-

Camin. gainſt the river of Stetyn. Camin lyeth fiue leagues to the eaſtwards of the Swin, upon the eaſt ende of the Haffe or broad water of Stetyn: that channell goeth through alſo with a river in to the Haff.

Four or fiue leagues without the land, when Iaſmondt is weſt, or thereabout, the Peert weſtſouthweſt, and the Rough Iland ſouthweſt & by

Banck. weſt from you, there lyeth a banck of ſeuen fathome, upon one place ſomewhat leſſe, and upon an other ſomewhat more, betwixt it and the land towards Iaſmondt it is again thirteen, fourteene, and fifteene fathome deep, but to the eaſtwardes of the New deepe, alongſt by the coaſte of Pomeren, it is all ſhoulde water, of four, fiue, ſixe, and ſeuen fathome, ſo farre into the ſea, that when you can but euen ſee the land of the Swin, there it is not deeper then ſeuen or eight fathome, without ſight of the land it is twelue and thirteene fathome deepe.

Of the grounds and depths about theſe places.

BEtwixt Faſterborne & Brontholme it is thirtie, and fiue and thirtie fathom deep, in the fair waie, but when you beginne to come neare Faſterborne there it is ſhoulder water of fourteene, fifteen and ſixteen fathome.

When you (comming from the weſt) ſaile alongſt by the ſouth ſide of Brontholm eaſtſouth-eaſt about a league without the land, and that the eaſt ende of Brontholme is eaſt ſomewhat ſoutherly about two leagues from you, there it is deep ſeuen or eight fathome groſſe pale ſand, that laſteth untill that the foreſaid eaſt ende be eaſt, and eaſt and by north aboute a league and a halfe from you, all in one depth, but when it commeth to be eaſtnortheaſt from you, it is fifteene fathome deep, ſmal blackiſh ſand ground.

Four or fiue leagues from Brontholme, when the eaſt end (from which Brewers riffe runneth off) is aboute eaſtnortheaſt or northeaſt and by eaſt, and the north ende about north, or north & by eaſt from you, there lyeth a banck of ſeuen eight or nine fathome, and lyeth northweſt and ſoutheaſt more then a great league long, the ſouthermoſt ende lyeth about ſouthweſt from the eaſt ende of Brontlolme. He that meeteth with this banck by night, may make ſome geſſing thereby, for to direct his courſe thereafter, whether he be bound eaſtwards towardes Reefcoll, or towards Faſterborne.

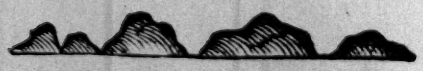
About two leagues eaſtſoutheaſt from the aforeſaide eaſt ende of Brontholme (to weete the lowe ſand point, where Brewers-riffe lyeth off) there it is four and twentie and fiue and twentie fathome deep, ſtonie ground.

About four leagues eaſt ſomewhat northerly, Bank thwt
or eaſt and by north from Meun, lyeth a banck of Meun.
of eleuen and twelue fathome, which laſteth from thence with a northweſt & by weſt courſe, untill that Meun come to be weſtſouthweſt, or ſouthweſt and by weſt from you, then it is again eighteen, nineteene and twentie fathome deep ſoft ground.

Faſterborne ſhall then be northnorthweſt & Steden weſtnorthweſt from you, going on with that ſame northweſt & by weſt courſe, you ſhall then get by little and little ſhowlder water, to weete, ſixteene and fifteene fathome, and cloſe by Steden fourteene, thirteene, and twelue fathome. He that commeth from Witmondt or Iaſmondt towards the Sound, & runeth alongſt four leagues without Meun, runneth alongſt over this foreſaid banck, he that findeth himſelfe by night upon it, hath a good marke for to make his reckoning thereafter.

How theſe lands doe ſhew themſelues at ſea.

Brontholme ſheweth it ſelf thus, when you come from the weſt.



The Eertholmes being northnortheaſt from you ſhew them ſelues thus.

The Eertholmes being eaſt from you ſhewe themſelues thus.

In this

Thus sheweth Witmondt, when you saile alongst by it, being three leagues off from it.

Thus sheweth Iasmondt when you saile alongst by it being three leagues from the Land.

In this forme ariseth the Eertholmes being north from you.

Here under is a great bay a league long.

Dornebosch.

Thus shewe themselues Witmont and Dornbosch with the land betwixt them both, when it is about southsouthwest from you, so farre that you may but onely see it from below.

WITMONT.

How these foresaid lands doe lye one from the other.

FRom Vasterborne to Elburgh east and by north and east northeast 4 leagues.
From Elburgh to Wtstee east & by north, and eastnortheast — 8 leagues.
From Wtstee to Goesbeer e n e. 3 leagues.
From Goesbeer to Sandthamer n. e. 1 league.
From Vasterborne, or from the riffe to Brontholme east — 20 leagues.
From Vasterborn to the northwards of Brontholme east and by north 20 leagues.
But to the southwards of Brontholm east, and east and by south — 23 leagues.
From Wtstee to the north point of Brontholm east and by south — 8 leagues.
From Meun to Brontholom east and by north — — — 21 leagues.
From Steden to the north ende of Brontholom east and by north — 24 leagues.
From Vasterborne to Whitmondt s. e. 19 leag.
From Vasterborne to Dornbosh southsoutheast somewhat easterlie 13 or 14 leagues.
From Meun to Whitmont e. s. e. 12 or 13 leag.
From Meun to Dorneboscb s. e. 9 leagues.
From the Iell to the point of Dornbosch north and by west — 2 leagues.
From Dornbosch to Whitmondt the course is northeast and by east — 4 leagues.
From Witmondt to Iasmondt e. s. e. 3 leagues.
From Iasmondt to the Peert s. s. e. 3 leagues.
From Dorneboscb to the north end of Brontholme northeast, easterlie 19 leagues.
From Dornbosch to the south ende of Brontholom northeast and by east 19 leagues.
From Witmondt to the north ende of Brontholom northeast and by north 14 leagues.
To the south ende northeast and by north 13 l.
From Iasmont to the south ende of Brontholm northeast — 13 leagues.
From the Peert to the south end of Brontholm northeast and by north 14 leagues
From Iasmond to Camyn e. s. e. 19 leagues

The end of the second Boook.

To the Book binder.

Place the Cardes thus.

Numb.	10, & 11,	before fol.	31.
	12, —	—	37.
	13, —	—	39.
	14, —	—	47.
	15, —	—	51.
	16, —	—	53.
	17, —	—	57.
	18, —	—	59.

The ſecond parts

THIRD BOOKE

of the

SEA-MIRROVR

of the Eaſterne and Northerne

NAVIGATION.

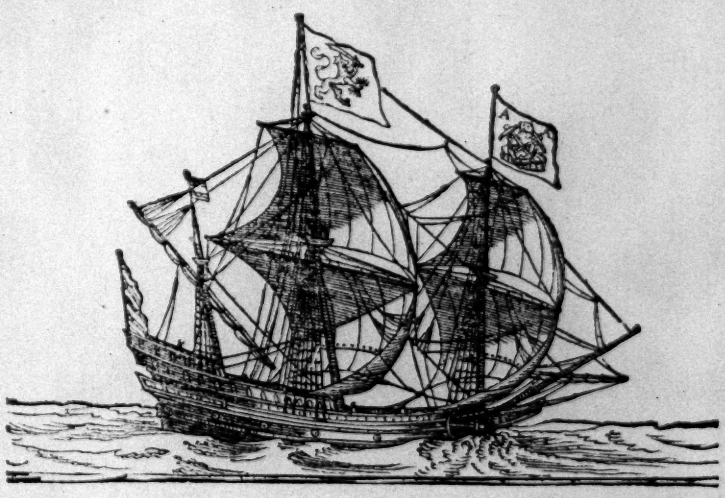
Containing

THE DESCRIPTION OF THE

Seacoaſtes of Pomeren, Pruſſia,

Coerland, Liefland and Sweden.

Lying upon the Eaſterne ſea.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.

Pascaart
vande
OOST-ZEE
Beschreven
door
Willem Lanss
Blaeu
Anno 1622

NOORWEGEN.

SWEDEN.

SWEDEN.

MARCKEN

DENEMARCKEN

Zeelandt

Holsten.

Mekelenborg.

POMERENIA.

Stocholm

Anstad

Graswick

Schaphil

Akersond

Farder

Dragens

Zunderwyneckholm

Distelbergh

Langebergh

Armensondt

Kruessondt

Paternosters

Maestrant

Naleus

Gottenburgh

Lonsbach

Monsterssondt

Waersbergen

Walkenburgh

Lazou

Anout

Hysslant

Elsenaur

Rosnes

Kallenburgh

Kunde

Stedem

Ealandt

Doornbus

Rostock

Lubeck

Wismer

Ahuys

Elbogen

Somerhuys

Carlholm

Bornholm

Hondsban

Schelsum

Westerwick

I. Vrouwenbergh

Fluirbuy

Stickholm

Munsterhuys

Skeggenas

Kalmer

Berkerhaven

Christianopolis

Groen Eylant

Stockholm

Warsholm

Hartstick

Rosholm

Elsinop

Zeland

Aldenburgh

Ruckholt

Greifswolde

Stettyn

OOST-FINLANT

Noord Bodem

Wyborgh

Narva

LIFLANDT.

COERLANT.

N. PRVYSSEN.

Revel

Parnout

Ryge

Sales

Der Memel

Koninxbergh

Hapsael

Oe sel

Der Winda

Met Privilegie der E.E. H.H. Heeren Staten generael voor thien jaren

Duytsche mylen 15 in een graedt

Spaensche mylē 17½ in een graedt

Eng. en Fr. mylen 20 in een graedt

19

1 2 3 4 5 6 7 8 9 10
Duytſche mijlen 15 in een Graadt
1 2 3 4 5 6 7 8 9 10 11 12
Spaanſche mijlen 17½ in een Graadt
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Engelſ. en Franſ. mijlen 20 in een Graadt
De Zeecuſten van Pomeren tuſſchen het Swin en Rijgſhooft.
CASSVBEN
Lyba
Serneviße
Wolsacken
Rijgshooft
Reefcol
Ter Stolp

POMEREN

Kolbergen

Southorn

Camin

Coslin

De Wipper

Brounsers Rif

Nex

Rotum

Borholm

Suanc

Slot

Certholms

20

THE THIRD BOOKE of the EASTERNE AND NORTHERN NAVIGATION.

Conteyning the Deſcription of the Coaſts on both ſides of the Eaſt ſea, from Bronthollom and Statyn Eaſtwards unto Wyborch.

CHAP. I.

Of the coaſt of Pomerland betwixt Statyn or the New Deep and the Roſehead.

THE New-deepe and Colberghen lye eaſt and weſt 16 or 17 leagues aſunder.

Colberghen. The haven of Colbergen you muſt ſaile into betweene two heads, vntil you come before the Towne. Within in the river, right over againſt the town, lyeth a Well or Brook, which can giue all the countrey thereabout ſalt, of water which they ſeeth, and yet the water of the river is freſh as Milk, for it is a litle water that cometh out of the land. The coaſt of Pomerland lyeth from Colberghen to Garſhead northeaſt and by north, and ſouthweſt and by ſouth about 13 leagues, betwixt them both lie two havens more, to wit, Coſlyn and Ruwolde.

Coſlyn. The haven of Coſlyn lyeth from Colbergen northeaſt 4 leagues diſtant. And from Coſlyn to Ruwolde the courſe is northnortheaſt 5 leagues. Into the haven of Ruwold, or the litle river called the Wipper, an indifferent ſhip may go in. It is from Ruwolde to Garſhead northnortheaſt 4 leagues.

Ruwolde.

The land lieth from Garſhead to the Roſehead eaſtnortheaſt 19 or 20 leagues, betwixt them lye the havens of Stolp, Liba, and Sernevis.

The Stolp. A litle to the eaſtwards of Garſhead lyeth the haven of the Stolp, which is a river ſo called as the towne, which runneth up to the ſame towne, onely for ſmall ſhips, although that there doe indifferent great ſhips lade.

Reefcoll. From Garſhead unto Reefcoll it is all a white Strand, and lieth northeaſt and by eaſt from it 4 leagues. Reefcoll is a high round hill very good to be knowne, when you come off from Bronthollom. From Reefcoll to Liba it is 7 leagues.

Liba lyeth upon a great river called the Oſſe. From Liba to Sernevis are 5 leagues, betwixt them lye the three Woolſacks, which are three black tuffes of trees, whereby this land is very good to be knowne, a litle to the eaſtwards of theſe three little hommocks lyeth a long hill which doth ſhew it ſelfe (when you come out of the weſt) on the weſt end divided into three or foure little hommockes. Seven or eight leagues to the eaſtwards of the Woolſackes followeth the high land of Roſe-head, which is very ſteep upon the water ſide. Betwixt the Roſe-head and Reefcoll it is all a white ſtrand, and moſt of the land grown with trees.

Liba. Sernevis.

Sernevis is a litle towne lying upon a little off water, which with a little river runneth into the ſea, but within, it doth ſpread it ſelfe into a great river. It is from Sernevis to the Roſe-head 4 leagues.

Sernevis.

You may ſound about the Roſe-head in 15 and 20 fathom, and alſo you may well ancker under the Roſehead, there is better ground then under the Heel. All the ſtrand of Pomerland is alongſt the ſea ſide aboue, all black with trees.

Of the depths and grounds about theſe places.

BEtwixt Bronthollom and the coaſt Pomerland, in the fare-way, when you can ſee Bronthollom, it is 26 fathom deep, but ſo farre to the ſouthwards that you can ſee the coaſt of Pomerland, there it is 7 and 8 fathom deepe, but without ſight of the land 12 & 13 fathom deepe. Alongſt all the coaſt of Pomerland betwixt the New-deepe

and Roſe-head, it is alongſt by the coaſt 22, and 20, and alſo well 25 fathom deep.

Betwixt Colsberghen and Garſhead it is all a flat even ſtrand and ground, without any banckes. In the fareway betwixt Brunthollom and Keefcoll, it is 27, and 28 fathom deep, but farre to the northwards of it, it is at leaſt 35 and 38 fathom deep.

Northweſt from Reefcoll 4 or 5 leagues from the land, lyeth a banck of 9, 10 and 11 fathom, when you come from Brunthollom, and Reefcoll commeth to bee ſoutheaſt and by eaſt from you, then you come againſt this bank, and endeth when Reefcol is ſouth and by eaſt from you.

From this foreſayd banck towards Brunthollom, it is 25, 30, and 36 fathom deepe, ſoft clay ground, but towards Reefcoll it is ſhowlder.

If you caſt the lead often, ſailing alongſt that coaſt, you ſhall finde more bankes.

You may boldly ſaile alongſt this coaſt by night, or darke weather in 8, 10 or 12 fathom off from Reefcoll untill about the Roſehead. Thwart of the Roſe-head it is farre flat, and ground as riffe ground. When you come paſt or about Roſe-head, it is very deep.

When the Roſe-head is ſouthſouthweſt from you about a league, there it is 30 fathom deepe, but very uneven and full of banks, and the ground white groſſe ſand.

Roſe-head being ſoutheaſt from you, it is 28 fathom deepe, with red ſtony ground, almoſt like as if it were riffe ſand.

Roſe-head being weſt from you, there it is 16 fathom deep, and white ſand ground.

Courſes and Diſtances.

FRom the New-deepe to Colberghen the courſe is eaſt, and eaſt and by north 16 or 17 leagues
From Camyn to Colberghen northeaſt and by eaſt 4 leagues
From Colbergen to Coſlyn n.e. 4 leagues
From Coſlyn to Ruwolde northeaſt and by north 5 leagues
From Ruwolde to Garſhead northeaſt and by north 4 leagues
From Garſhead to Reefcoll northeaſt and by eaſt 4 leagues
From Reefcoll to Lyba e.n.e. 7 leagues
From Lyba to Sernevis e.n.e. 5 leagues
From Sernevis to the Roſe-head the courſe is eaſtnortheaſt 4 leagues
From Colsbergen to Garſhead northeaſt and by north 13 leagues
From Reefcoll to Roſe-head the courſe eaſtnortheaſt 16 leagues
From the ſouth end of Brunthollom to the Swin ſouth 13 leagues
From the ſouth end of Brunthollom to Colbergen ſoutheaſt 16 leagues
From the ſouthend of Brunthollom to Reefcoll the courſe is eaſt, and eaſt and by ſouth 24 leagues
From the ſouth end of Brunthollom to the Earthollomsnorth 4 great leagues
From the north end of Brunthollom, or from the Earthollomsto Roſehead the courſe is eaſt, and eaſt and by ſouth 40 leagues

How moſt of all the chiefeſt points and places of the eaſt ſea do lye diſtant from Brunthollom.

FRom Brunthollom to Der Memell eaſt & by north 65 or 66 leagues
From Brunthollom to Der Lyba eaſtnortheaſt 67 or 68 leagues
From Brunthollom to Derwinda northeaſt & by eaſt 80 leagues
From Brunthollom to Eaſtergore northeaſt or ſomwhat northerly 63 or 64 leagues
From Brunthollom to Houbrough, or the ſouthend of Goteland northeaſt ſomewhat northerly 50 leagues
From the north end of Brunthollom to Southernorden the ſouthend of Oeland northeaſt and by north 25 leagues
From the ſouthend of Brunthollom to Southernorden northnortheaſt 27 leagues
From Brunthollom to the Rockes northeaſt 19 leagues
From Brunthollom to Hanno the courſe is north and by weſt 12 leagues
From the north end of Brunthollom to Santhamer northweſt 5 leagues
From the north end of Brunthollom to the point of Goesbeer w.n.w. 5 leagues
From the north point of Brunthollom to Vtſtede weſt and by north 8 leagues

De Zeecuſten van Pruiſſen tuſſchen Rijgſhooft en Der-Memel.

Duytſche mijlen 15 in een Graadt

Spaanſche mijlen 17½ in een Graadt

Eng. en Franſ. mijlen 20 in een Gr.

PRVYS

Koningsbergen

Brandenburch

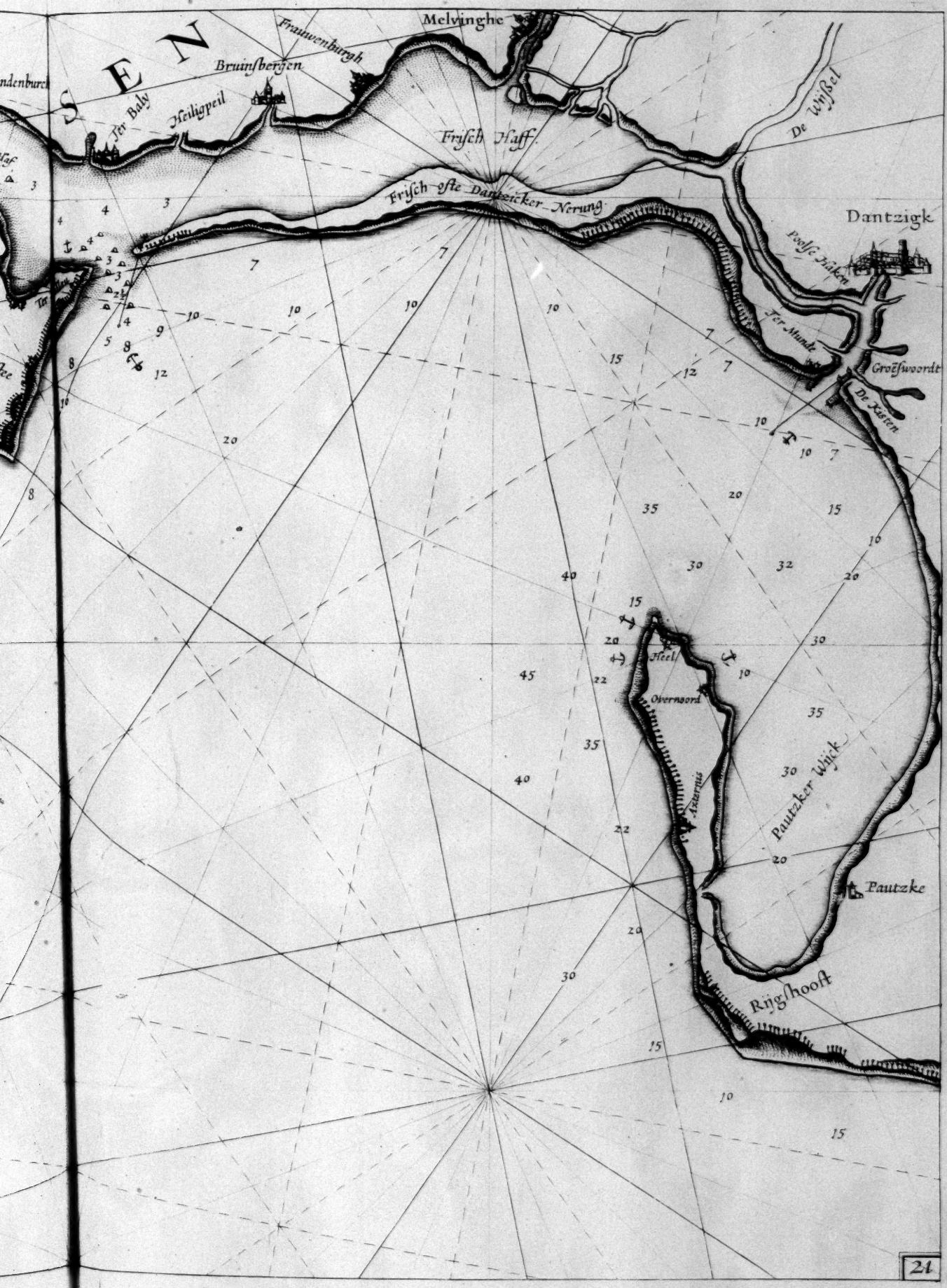
Fiſchuyſen

Loofstee

Bruſterort

Curſche Nering.

Der Memel


Melvinghe
Fraitwenburgh
Bruinsbergen
S E N
Fer Baly
Heiligpeil
Frisch Haff
De Wijsel
Frisch oste Dantzicker Nerung
Dantzigk
Poolse Baken
Fer Munde
Groesswoordt
De Xarten
Hiel
Overnoord
Azarmis
Pautzker Wijck
Pautzke
Ringhooft
21

How these Lands doe shew themselues at sea.

Thus sheweth the land betwixt Colbergen and the Stolp, when you saile alongst by it about two leagues without the land.

Woll-sackes. Reefcoll.

Thus sheweth the land betwixt Reefcoll and the Rose-head when you saile alongst by it three leagues without the land.

The Rose-head

CHAP. II.

For to saile from the Rose-head to Danske, Quinsbrough, Melven, and Der Memell.

FRom the Rose-head to the Heele, the course is south-east eight or nine leagues distant. When you come neere the Heele, you are almost ground off in thirtie fathom. On the coast of the Heele close by the land, it is 24 and also 30 fathom deep.

Vnder the Heele you may ancker in 16 and 20 fathom close by the land, the ground there goeth off very much. If you be a little off from the land, then you are ground off, not very farre without the land you haue no ground in 40 fathom. A league to the northwards of the Heele there runneth off a flat from the land, whereof you must take heed, when you will go to ancker under the Heele, you may anker on both sides of the Heele, but on the inner side it is soft ground. Roade under the Heele.

From the Heele to Danske before the Wissell, the course is south and by west 5 leagues. If you will anker before the Wissell, then ancker to the westwards of the Chests, or the Wester-head in 10 or 12 fathom.

But for to saile into the Wissell, or the Danske Deep, you must look for the two masts with barrels upon them, which stand upon the Chests, or the Wester-head, bring them one in the other, and saile in right with them, in betwixt the Chests, but when you are within Termunde, you must choose the easter shore, for the West shore is flat, when you come before Boatsmans flat, you must choose the side of the Green-shore, and make there fast with foure hawsers or cables. Danske Deep.

The Quinsbrough deepe lyeth from the Wissell, or the Chests of Danske eastnorth-east, and northeast and by east 13 leagues. From the Rose-head east and by south 17 or 18 leagues, and from the Heele east and west 13 leagues. Quinsbrough deep

From the Wissell to the Quinsbrough deep and all alongst to the northwards of it, is altogether a faire white sandy strand, upon both sides of the deep stand some withered trees, to see to as if they were burnt, but upon the south side stand two Capes, or beakons. If you will saile in there, bring the capes one in the other, when you come in 10 or 8 fathom, and saile in so right with them, and so you shal run right with the buyes, which lye on both

ſides of the Deepe to 8 or 10 in number, to wit, on each ſide foure or fiue, ſaile in betwixt them, untill you come within in the Kettell. There is no certainty to be written of the lying in of this chanell, as alſo of the Danske deep, whereunto men might truſt, for by reaſon of the ſcouring of the Freſhuts, and with great ſtreaming of the Ice, they doe change oftentimes, and ſometimes in ſhort time, but the Lords of the land there haue very great care to giue charge that they be alwayes well ſet with buyes and beakons.

For to anker in the road without the deep, then anckor ſo that the point of Lockſteed lie about north and by eaſt from you, there it is eight nyne and ten fathom deep.

Within the Deep in the Ketell, men do lie to taraie for the wind in three fathome and three fathom and a halfe.

For to ſayle up the Haff go out of the ketel about eaſt untill you come againſt the Heert, and ſoutheaſt over it, & then alongſt the Haff amidſt the chanell unto the Haverſtrome, the courſe is moſt eaſt. Being over the Heert edge ſomewhat to the ſouth ſhoare for to avoyd that riff which lyeth off from the north ſhoare about a third part into the Haffe, to wit, from the point by eaſt Fiſhouſes, there lyeth a little buye upon it, and come no neerer it then 12 or 13 foot. The right fareway is to the ſouthwards of it 14 and 15 foote ſoft ground, untill about Brandenburgh, from thence further it is by litle and litle ſhowlder 12, 11, & 10 foot upon the Haverſtraw. When you get the ſteeple of Quinsbrough in ſight, then you ſhall ſee alſo by it, a round black little wood, keep the ſteeple on the north or eaſt ſide of that little wood, untill that you be paſt Brandenburgh, then let the ſteeple come a ſhips length to the eaſtward of the litle wood of trees, & ſaile ſo right with it, till you come by the buyes or little trees of the Haverſtraw, there you muſt run through amidſt the chanell betwixt them, untill you come into the Pregell which lieth up northeaſt unto the towne.

Melven. From Der Pillo to Quinsbrough are about 8 leagues, but to Melven it is about 9 leagues, you muſt alſo ſaile up there amidſt the chanel about ſouthweſt, but the point over againſt the Pillo, where the caſtle Terbaly ſtandeth, you muſt avoid ſomewhat, which runneth far off flat.

Foure or fiue leagues north and north and by weſt from the Quinsbrough Deep lyeth the point of Bruſteroort, and betwixt them both Loocſteed, whereupon ſtandeth a Caſtle with a Church not farre one from the other, and alſo two high hommocks or hills, and the land thereabouts is all full of trees.

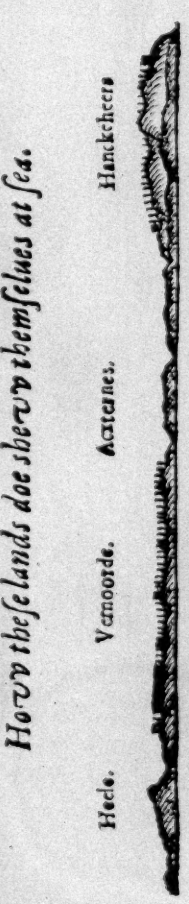
From Bruſteroort to the Deepe of Der Memell, the courſe is northnortheaſt 16 or 17 leagues. It is there betwixt them both a faire ſtrand, and the land lyeth in a great Bay. The Deep of Der Memell lyeth in northeaſt, and northeaſt and by eaſt, and is two fathom deep, within it you come into a great Haffe: you may runne to the weſtwards about the point, and ancker there where you will. Der Memel

Of the depths and grounds about theſe coaſts.

BEtwixt the Heele and the Roſe-head, but neereſt the Heele, there it is 33 fathom deepe, and the ground is there white ſand.

At the Heele in the roade it is 25 fathom deep, the ground black ſand, and going off to 30 and 40 fathom.

Betwixt the Heele and Quinsbrough it is very deepe, comming neere the Heele it is ſteepe, but towards Quinsbrough and the Nerung it goeth up plainly flat.



How theſe lands doe ſhewe themſelues at ſea.

Thus ſheweth the land betwixt the Roſe-head and the Heele.

Thus ſheweth the land betwixt Quinsbrough deep and Bruſteroort.

How these foresaid lands doe lye one from the other, and from other lands.

FRom the Rose-head to Axternes southeast 4 leagues
From Axternes to Vernorden southeast 1 league
From Vernorden to the Heele southsoutheast 1 league
From the Heele to Danske south and by west 5 leagues
From the Chests or Wissell of Danske to the Deepe of Quinsbrough eastnortheast, and northeast and by east 13 leagues
From the Deep of Quinsbrough to the point of Brusteroort north and north and by west 4 or 5 leagues
From Brusteroort to the Deep of Der Memel northnortheast 16 or 17 leagues
From the Rose-head to Quinsbrough deepe east and by south 17 leagues
From the Heele to Quinsbrough Deepe east 13 leagues
From the Rose-head to Der Memell northeast and by east 29 leagues
From the Rose-head to Sevenbergen northeast 33 leagues
From the Rose-head to Derwinda northeast and by north 53 leagues
From the Rose-head to Dageroort northnortheast 80 leagues
From the Rose-head to Eastergore, north somewhat easterly 45 leagues
From the Rose-head to Houbrough the south end of Goteland north somewhat westerly —— —— 34 leagues
From the Rose-head to the south end of Oeland northwest 33 leagues
From the Rose-head to Hannoe the course is west and by north somewhat northerly 38 or 40 leagues
From the Quinsbrough Deep to Houbrough the south end of Gotland northwest and by north 48 leagues
From the Quinsbrough deepe to Southernorden, the south end of Oeland, northwest and by west, and westnorthwest 50 leagues
From Der Memell to Houbrough westnorthwest 37 leagues

CHAP. III.

Of the coast of Coerland betwixt Dermemell and Derwinda.

FRom Dermemell to Heyligena the coast lyeth north and by west 4 leagues
From Heyligena to the point of Sevenberghen, northnorthwest 5 leagues, that is with hommocks and hilly land.

Terlyba. Foure or fiue leagues north and north and by east from Sevenberghen lyeth Terlyba. There goeth into the land a little river, but there can go in no shippes, there is no more then 6 foot water. On the north side of the river standeth a Gentlemans house or Castle, with a turret upon the midst of it, the northend of the house is covered with boards, and the south end with red tyles, to the southwards or to the eastwards of it stand also some houses, covered also with tyles, in betwixt two woods to see to. If you will ancker in the road of Terlyba, then anker a little to the southwards of the village, so that the foresaid Gentlemans house with the turret doe stand east and by north from you in foure fathom and a half, and 5 fathom lesse two foot, there is the best road and ground that is therabouts. When you come out of the sea, and fall with the land to the eastwards or to the northwards of Terlyba, you shall see within the land a black wood, and the houses in a ragged valley of Sand-hills. From Terlyba to Derwinda the course is north and by east 16 or 17 leagues, betwixt them both the land lyeth in a bight, so that the coast alongst by the shore lieth not so right, especiully 4 or 5 leagues by south Derwinda, there it falleth away into a great bight, which men do call Sackerwyke, and also with more smaller bights and bayes towards Terlyba.

About 4 leagues to the northwards of Terliba lieth a point called Stickeroort or Steenoort, thwart thereof it is very flat, so that a good wayes from the land, it is not deeper then nine, ten, and 12 fathom, all stony uneven ground, of this point you must take good heed, and not come too neere it. Anno 1599 in the Spring a man of Hoorn sayled somewhat neere to this shewld, and came on ground upon an unknowne rock, and lost his ship. To the northwards of it, towards Derwinda, thwart of Sackerwycke it is all cleane ground, and farre flat, at many Sackerwyke. Steenoort.

Duytsche mylen 15 in een gradt.
Spaansche mylen 17½ in een gradt.
Engelsch en Franse mylen 20 in een gradt.

Derwinda
Bacovens
Ducdalven Slot.
Sackerwyck
Stickervoort ofte Steenvoort
Terlyba
Sevenbergen
Pleiligena
Der Memel

De Zeecusten van Coerlandt tusschen Der Memel en Derwinda.

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places a good wayes from the land not deeper then 6 and 7 fathom clean ſandy ground, good for to ancker in, when you lye by there with a northeaſt winde, and can get nothing with turning to windwards. But if you keepe under ſaile, you may in turning to windwards come neere the ſhore every where without feare in 4 or 5 fathom.

For to know Coerland.

For to know this coaſt of Coerland, then remember theſe places here under written.

Bakeovens.

At Derwinda ſtandeth a Caſtle with three Towers, which is covered aboue with red tyles, and under it is white, about a league to the ſouthwards of Derwinda, lyeth the Bakeovens, which is next to Domeſnes, the beſt land to be known of Coerland, it ariſeth firſt when you beginne to ſee the land, in a white Sandhill, the top whereof is full of trees, but when you come ſo neer the ſhore, that you can ſee the other land alſo, then there ariſeth more land with hommockes, ſo that then it is not ſo good to be known.

Duke de Alvas Caſtle.

About foure leagues to the ſouthwards of it in Sackerwyke lyeth yet a hommock or hil full of trees with ſome little hommockes to the eaſtwards of it, when you are thwart of Derwinda, you may even ſee it half wayes up to the top, but not well from below. This hommocke is called by ſome Duke Dalves Caſtle and lyeth moſt alone: the land, as well to the ſouthwar ds as to the northwards of it, is moſt all even and plain land.

About ſix leagues to the ſouthwards of the foreſaid hommock, and 5 or 4 leagues and an halfe to the northwards of Ter Lyba, lye alſo two high hommocks cloſe one by the other, the land to the ſouthwards of them towards Ter Lyba, is to ſee to a farre off, (when you are thwart of theſe two hommocks, or ſomewhat to the northwards of them) as if it were all broken land, thwart of this about 5 leagues from the land, or when you can but even ſee the land from below, it is 30 fathom deep.

Bank by Derwinda.

When you begin to come about Derwinda within 2 or 3 leagues of the land, there lyeth a banck of 12, 13, and 14 fathom: ſome ſay that weſt and by north from Derwinda, there ſhould be no more upon that banck then 5 or 6 fathō water, it is about a halfe league broad, betwixt the bank and the land a league without the ſhore, it is againe 20 and 24 fathom deep.

Road before Derwinda.

If you will ancker before Derwinda, then bring that foreſaid Caſtle about eaſtſoutheaſt from you, then it cometh almoſt behinde the high land, and ancker in 5 fathom from the ſhore, there is the beſt rode.

How theſe places lye one from the other, and from other lands.

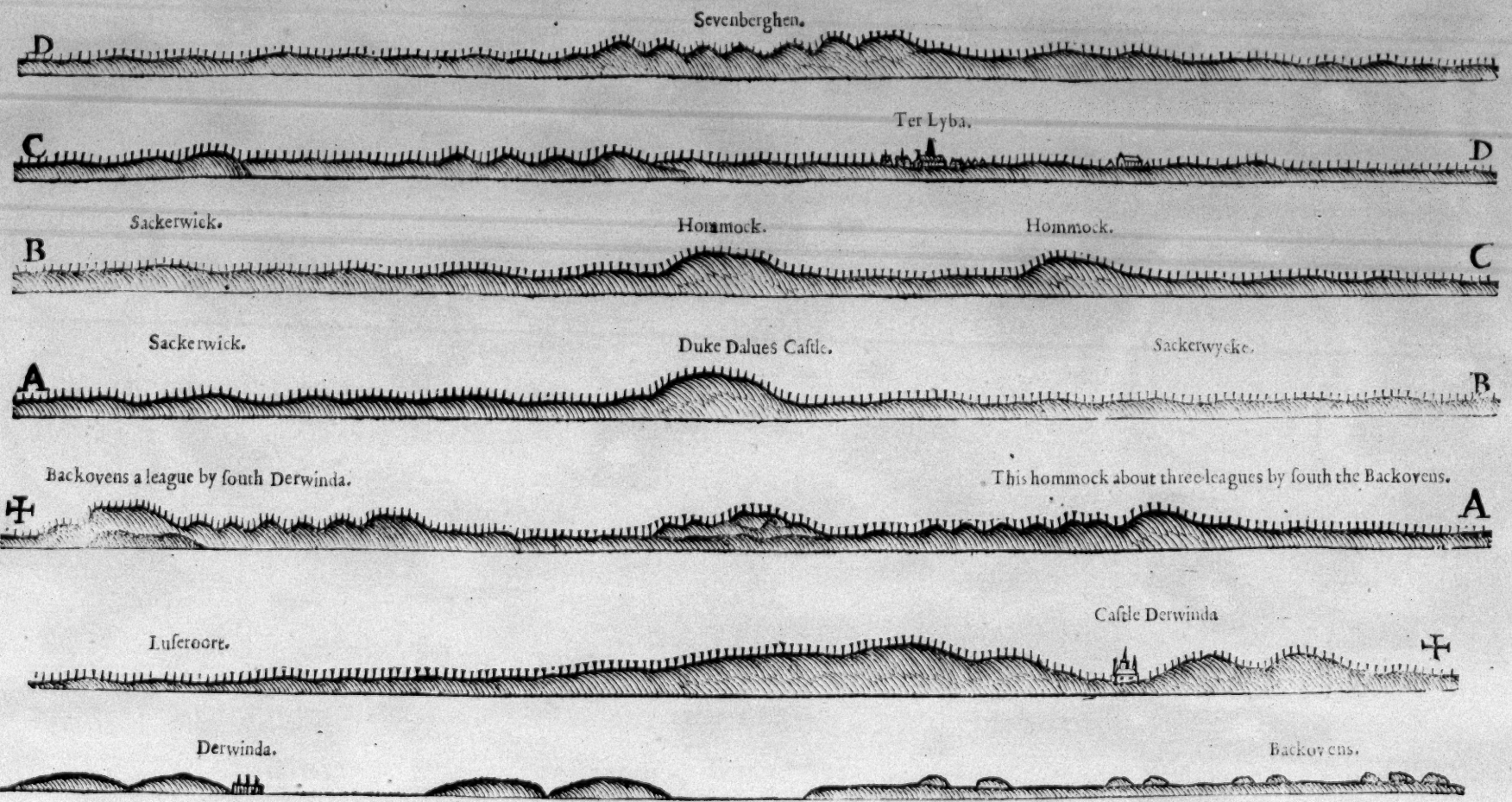
FRom Der Memell to Heylighena north and by weſt 4 leagues
From Heylighena to the point of Sevenberghen northweſt 5 leagues
From Sevenberghen to Der Lyba north and north and by eaſt 4 or 5 leagues
From Der Lyba to Derwinda north and by eaſt 16 or 17 leagues
From Der Memel to Bruſteroort ſouthſouthweſt 16 or 17 leagues
From Der Memell to Danske ſouthweſt and by ſouth 32 leagues
From Der Memell to the Roſe-head ſouthweſt and by weſt 29 leagues
From Der Memell to the Eartholloms, or the north end of Bronthollom, weſt and by ſouth 64 or 65 leagues
From Der Memel to Houbrough weſtnorthweſt 37 leagues
From Sevenberghen to the Roſe-head ſouthweſt 33 leagues
From Sevenberghen to Southerorden weſt ſoutherly 48 leagues
From Derwinda to the Roſe-head ſouthweſt and by ſouth 53 leagues
From Der winda to Brunthollom ſouthweſt and by weſt 80 leagues
From Derwinda to Houbrough weſt and by ſouth 37 leagues
From Derwinda to Eaſtergore the courſe is weſt 29 leagues
From Derwinda to the Godtſche ſand northweſt and by weſt 31 or 32 leagues
From Derwinda to Dageroort north and by weſt ſomewhat weſterly 33 leagues

How theſe lands doe ſhew themſelues at ſea.

Thus ſheweth it ſelfe the coaſt of Coerland about Sevenbergen, when you ſaile alongſt by it a league without the land.

The

The coaſt of Coerland from Sevenberghen alongſt by Derwinda unto Luſeroert ſheweth at is portrayed in theſe ſixe figures following, the like markes belong one to the other, as AA, BB, CC, DD, &c.



When Derwinda doth ſhew it ſelfe firſt being eaſt from you, it ſheweth it ſelfe thus with the land, as well to the northwards as to the ſouthwards, but when the Caſtle doth begin to come eaſt ſoutheaſt from you, then it goeth behinde the land that you cannot ſee it.

OESEL

Abrick

Wijck

Dwaelgronden

Oysel

Doemberg

Doemberg ofte blauwe bergh

Lyseroort

Derwinda

Zeecaarte verthoonende 't Canael tusschen 't zuyd einde van Oesel en Coerlandt en den grooten inham van de Rygsche Zee.

Duytsche mylen 15 in een Graadt

Spaansche mylen 17½ in een Graadt

Eng. en Franse mylen 20 in een Graadt

Kyn

Lemsael
ofte Sales

Runen

Kouwertsijck

Diepena

Ryga

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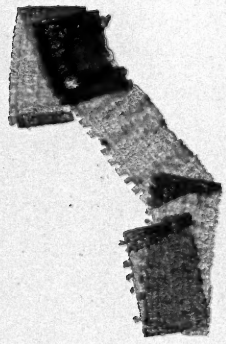


CHAPT. IIII.

How men shall saile from Derminda aboute Domesnes to Rye.

THE lying of Derwinda, & how men shall know it, is declared in the former chapter.

From Derwinda to Lyserorte the coast lieth northeast and by north 4 leagues: and from Lyserorte to Domesnes eastnortheast and northeast and by east 12 or 13 leagues. When you are thwart of Lyserorte, you can perceiue no point, it seemeth to be all an euen right coast from Derwinda to Domesnes, but comming from Derwinda or from Domesnes, and being a league or two to the eastwards, or to the westwards of it, you can see wel that it is a blunt point lying out. Thwart of Lyserorte runneth off a great uneuen shoulde, at least two leagues into sea, but you need not fear of it, you may runne over it in four, fiue, or six fathome by the lead, like as also alongst all the coast of Coerland from Derwinda, until about Domesnes.

To the westwards of Lyserort the land hath a little bight, there you may ancker for northeast, e.n.e. and east winds: when it bloweth hard, & that you can do no good with turning to windwardes, you must bring the point of Lyserorte e.n.e. from you in seuen fathome, there is clean sand ground and good lying.

The land betwixt Domesnes and Derwinda is verie good to be known. At the pointe of Derwinda it is high, & goeth sloping down by little & litle to the eastwards unto Lyserort: Likewise 3 or 4 leag. by west Domesnes lyeth a high blue hil, called the Doembergh, which is steep on the east side, and goeth by litle & litle sloping down to the westwardes unto neare Lyserorte, so that there two high double blue lands do goe down into a valley one against the other, the low land betwixt both is Lyserorte. The point of Domesnes it self is low sandie land, & lieth out aboute 3 leagues to the eastwards of the foresaid Doemberg: but al that land is altogether ful of trees.

Lyserorte.

The south end of Oesel lyeth from the point of Domesnes northwest aboute four leagues asunder, there runneth off a great Riffe, aboute south and by west, and southsouthwest into sea, towardes the showlde of Lyserorte, called Swaluerorte, that is a daungerous riffe, at least three leagues long, verie hard and uneuen, at some places towards Oesell it lyeth drye aboue water, and at some other places it is two, two and an half, & three fathome deep. To the westwards of that riffe lie also manie uneuen Dwaelgrounds a good waies off from the land, which lie alongst the coast of Oesel to the northwards which are at some places not deeper then two, three and four fathome.

Riffe of Oesel. Swaluerorte.

If you will goe to Rye, and comming out of the sea doe fall with the land aboute Derwinda, then leaue not the coast of Coerland, but runne about by it upon the lead, all alongst unto Domesnes in four, fiue, sixe or seuen fathome, according as you haue the wind, that you may not fall without, or to the westwardes of that riffe Swaluerorte. The channell betwixt Coerland and that foresaid riffe is fourteene, fifteene, and sixteene fathom, but verie uneuen. The ground upon the should thwart of Lyserorte is at some places also very uneuen for to sound, sometimes sixe, sometimes eight, and nine fathome, the one cast at least two or three fathome more or lesse then the other, and that not very farre from the land, but you neede not feare of it, you may bouldly runne to the shoare in four and fiue fathome.

But if (when you come out of the sea) you are past Lyserorte, & come with the land to the northwards of it against Oesell, then you haue deepe water, for not far to the westwards without Swaluerorte it is thirtie fathome deepe. If you can see Oesell and Coerland, and that the Doembergh be eastsoutheast, or southeast and by east from you, then runne on southeast, untill you come neare Coerland, for to avoide Swaluerorte, and then alongst by it upon your lead towards Domesnes, as is before saide. Or when as you haue the Doembergh eastsoutheast from you, then keepe it so standing from you, and saile in so right with it, and then you shal (without hurte) runne alongst over the taile or outermost shoulde of Swaluerorte, it shouldeth up there verie soone and sodenly from thirtie to fifteene and nyne fathome, but if you bringe the east side of the Doembergh not more southerly from you then eastsoutheast and southeast and by east, then you shall not meete with any danger of the Dwaelgrounds, nor of Swaluerorte, you shall thus saile alongst at least three leagues over the Dwaelgrounds and Swaluerorte, over verie uneuē grounds, the one cast at least twelue the other nine, and also vvell seuen, and sixe fathome, but goe on your course without feare, when as the Inner side, or east side of the south end of Oesel cometh to be north, and north and by east from you, then you are over the riffe, & within all the foule groundes that might hurte you, when as that you gette then thirteene or fourteen fathome, then saile bouldly without fear towards Domesnes.

Marks for to shunne Swaluerorte.

If it should happen, that with a northwest wind, you should fal with the land to the northwards of Derwinda or Lyserort, & should fear to

come neere the coaſte of Coerland, then keepe not further off to ſea, then that the eaſt pointe of Doembergh be eaſtſoutheaſt from you, when that you bring the eaſt ſide of the ſouth pointe of Oeſell northnortheaſt from you, then you ſhal runne alongſt over Swaluerorte in ſeuen fathome. Betwixt Oeſel aud Coerland it is ſixteene and ſeuenteene fathome deepe. When as Domeſnes is ſoutheaſt and by eaſt, & the ſouth point of Oeſel northweſt & by north from you, and that you are alike neare to them both, there it is eighteene fathome deepe.

Riffe of Domeſnes. From the point of Domeſnes runneth off alſo a riffe northeaſt & by north, or a litle more northerly a league and halfe into the ſea, which is on the eaſt ſide verie ſteepe, but on the weſt ſide ſomewhat flatter.

When you come from out of the weſt, & are bound to Rye, you may runne about by it upon your lead, in fiue, ſixe, ſeuen, eight, nine & tenne fathome, ſo neare as you will, but according as the winde and weather ſhall be. I know of ſome that haue ſounded about it in four, and four fathome and a half: but he that will run ſo ſomewhat neare about it, muſt be verie carefull in uſing of his lead, and not let it reſt.

Not verie farre from the riffe, on the weſt ſide, it is twelue and thirteene fathome deep. When as the point of Domeſnes, where the withered trees ſtande upon come to be ſouthſouthweſt from you, then you come on againſt the weſt ſide of the riffe, when that point is ſouthweſt & by ſouth from you, then youare right thwart of the point, but when it is ſouthweſt, and ſouthweſt and by weſt from you, then you are about the riffe, and then you may bouldly goe on ſoutheaſt towardes Rye. Domeſnes and the Deepe of Rye lye ſoutheaſt ſomewhat ſoutherlie, and northweſt ſomewhat northerly, one and twentie leagues diſtant.

Aboute eight leagues to the eaſtwardes or to the ſouthwardes of Domeſnes runneth off another riffe from a pointe, which you may ſound about in fiue and ſixe fathom. The land betwixt Domeſnes & that point lieth about ſouthſoutheaſt and northnorthweſt, but to the ſouthwards of it, it falleth away to the ſouth, ſo that betwixt this point, and the Deepe of Rye, there is Kowerwyke a great baye, which is called the Kowerwyck: ſomewhat to the ſouthwards of this pointe in the bay, lieth ſome high land, which lyeth from the Deepe of Rye weſt and by ſouth, and eaſt and by north. It muſt be verie cleare weather when you can ſee it, lying at ancker before the Deepe of Rye. When as (comming from Rye) you ſhal be ſomewhat to the ſouthwards in the Kowerwike, and come running out there by the ſhoare, this foreſaid point hath thus oftentimes been miſtaken for Domeſnes, becauſe that then you can ſee no land without it, but when as you come about the point, you ſhall againe ſee the land out a head, then you are yet aboute eight leagues from Domeſnes.

Rode vnder Domeſnes. Vnder the point of Domeſnes you may ancker on both ſides, as wel to the weſtwards as to the eaſtwards. If you wil anker to the weſtwards of it, then ancker in ſixe, ſeuen or eight fathom, there you haue good ſand ground, and ſheltered for eaſt and ſoutheaſt windes. If you wil anker to the eaſtwards of it, then anker in ſixe or ſeuen fathome, a little within the point of the land, ſo that the pointe be north, or north and by weſt from you, there is good ſandie ground, & good lying for a ſouthſouthweſt, weſt, northweſt, & northnorthweſt winde: the point of the riffe lyeth then frō you aboute northnortheaſt a league and half. If you will ancker further from the ſhoare, ſo that the point of Domeſnes be northweſt, or northweſt & by north from you, there it is eighteene and twentie fathome deep & ſoft ground.

If that comming off from Rye againſt the riff of Domeſnes, you wil ſail about it, then you muſt runne farre enough about without it, or if you will take it ſomewhat near, you muſt be exceeding carefull in uſing your lead, It is (as hath bene ſaid) verie ſteepe on the eaſt ſide, with a northweſt waie, (which runneth thwart into the riffe) you ſhall haue the one caſt twelue, nine, or eight, and the next caſt four, or three fathome, if you fall within the point of the riffe. But if you haue been at ancker under Domeſnes, and ſet ſayle from thence, and will ſaile about the riffe, then you may the better runne about it by your lead. Goe from thence n.n.e. and northeaſt and by north, that runneth moſt alongſt by the riffe. When the point of Neſſe commeth about weſt from you, then it will be by little and litle ſomewhat ſhoulder, you may ſound about it ſo in fiue, ſixe or ſeuen fathom, then you muſt not ſpare your lead, but muſt ſound often. With a northweſt courſe come not nearer it then in 9, 10 or 12 fathome. When the point of Nes cometh to be ſouthweſt from you, then you come to the eaſt ſide of the riffe, when that is ſouthweſt & by ſouth from you, then you are right thwart of the point of the riffe, but when it is ſ. ſ. w. from you, then you are about the riffe, go then weſtſouthweſt, or more ſoutherly towardes Coerland, and runne alongſt by it, in fiue, ſix, or ſeuen fathom, (according as the winde ſhal be) toward Lyſeroort.

If you ſaile from Rye with an eaſt or northeaſt winde, and ſhal ſaile by night about the rif, then ſet your courſe ſo, that you be ſure you runne farre enough alongſt to the northwards, or vvithout the Riffe, and keepe that courſe untill that you come neare the grounds of

Ambroeck

Ambrook or Oeſel in fifteen or ſixteen fathom, then you ſhall be without doubt paſt the riffe, then goe on a while ſouthweſt, untill that you reckon the pointe of Domeſnes to be ſoutheaſt, or ſomewhat more eaſterly from you, then edge up to the coaſte of Coerland by your lead, and runne alongſt by it, in four, fiue, ſixe or ſeuen fathome, as hath been before ſaid.

Round. Eaſt and by north eight leagues from Domeſnes lyeth the Iland Rounde : you may runne round about it by your lead, in ſixe or ſeuen fathome. All alongſt the ſouthweſt ſide it is all foule, and ſharp rockie ground, therefore come not nearer the ſhoare there, then in ſix fathome. Southſoutheaſt aboute a halfe league from the ſouth point lyeth a little plate, whereupon it is not deeper then ſix foot, there hath once a man beaten off his ruther. It lyeth betwixt the ſeuen and eight fathome depth. for to avoide that, take thereabouts the ſounding of the ſhoare in fiue or ſixe fathome, and then you run through betwixt it and the ſhoare, or els, if you keepe in eight or nyne fathome, then you runne aboute without it.

Road under Round. If you will ancker under Round for a ſouthſouthweſt, ſouthweſt or weſtſouthweſt winde: then runne about the ſoutheaſt point, until you come to the eaſt ſide, there is a little bay, where ſtand a few houſes with a chappell, which you can ſee when you come ſomewhat neare to the ſhoare, ancker thwart of it in fiue fathome, ſo that the chappel doe ſtand ſouthweſt from you, there is the beſt roade under Round, being clean ſandie grounde, but when it bloweth hard the ſea commeth rouling in. At other places it is not verie cleane.

The farewaie betwixt Round and Domeſnes is two and twentie and three & twentie fathom deepe, and betwixt Round and Duynemondt three and twentie and four and twentie fathom.

The Deepe of the river of Rye. From Round to the Deepe of Rye it is ſouthſoutheaſt, & ſoutheaſt and by ſouth 16 leagues. Before the Deepe of the river Duyn you may ancker in tenne fathome, either to the ſouthwards or the northwards of it, where you pleaſe.

The Deep of the river of Rye is Pilots water, aſwell in ſayling up, as ſayling off. How men ſhall ſaile there in or out it is not poſſible to deſcribe, ſo that men might relye upon it : for by reaſon of the continuall ſcowring of the ſtream, and eſpecially by ſome extraordinarie greate freſhuts, and ſtrong drifts of yce, the depths and ſhouldes do there often ſhift and change, whereof everie one that is bound thither may be mindfull of.

From the Deepe of Rye to Parno the courſe is north and by eaſt one and twentie leagues, betwixt them both, aboute twelue leagues from Lemſael. Rye lyeth a litle towne called Lemſael or Sales, there goeth in a little deepe of eight foot water. Before that Deepe lyeth a banck, which you may ſaile about on both ſides, and come within it, there it is three fathom deep. The Iland Kin lyeth from Sales northweſt fiue greate leagues : Kinne. from Round eaſtnortheaſt nyne leagues, and from the Deepe of Rye north, aboute fourteene leagues. It is a litle low Iland, about 3 leagues long, & hath round about it moſt foule ground. Betwixt Kyn and the coaſt of Lyfland it is four leagues broade, and the right deep betwixt them both is eight and nyne fathome deepe.

Northweſt and by weſt eight leagues from Round, and north ſeuen leagues from Domeſnes lyeth Ambroeck, that is a litle Iland, which is round about foul, with ſharpe ſtonie ground, and lyeth a great league diſtant from the coaſte of Oeſell. Betwixt Round and Ambroeck, but neareſt Ambroeck lye manie uneuen Dwaelgrounds, of three, four, and fiue fathome. Ambroeck and the ſouth ende of Oeſell lye northeaſt, ſomewhat northerly, and ſouthweſt ſomewhat ſoutherly about ſeuen leagues diſtant. Vnder the ſouth point of Oeſell on the eaſt ſide is a good roade for weſterlie windes. If you will ancker there, then ancker in eight or ſeuen fathome, ſo that the white church, which ſtandeth ſomewhat within the ſouthermoſt pointe, doe ſtand weſt & by ſouth from you, there is good ſoft claye ground, and you ſhall lie ſheltred for a weſt, and weſtſouthweſt winde. The ground is there verie euen and flatte, when as you gette the ſeuen fathome, and ſaile towards the land, it continueth long all one depth of ſeuen fathom, untill you come verie cloſe by the ſhoare before it will be ſhowlder.

Ambrooke. Dwaelgounds. Roade under Oeſell.

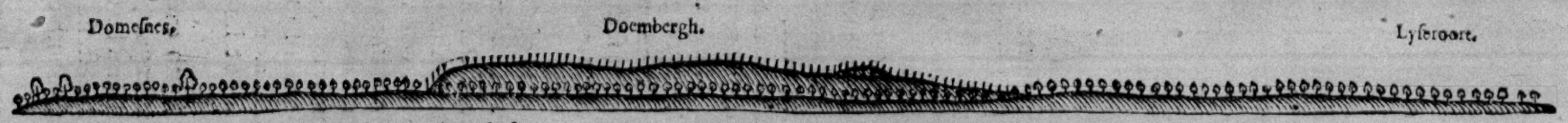
It is there all alongſt by the eaſt coaſt of Oeſel flatte ground of three, four, and fiue fathome.

For to ſaile from the ſouth ende of Oeſell unto Arentſbergh through within Ambrooke, you muſt leaue two thirds of the water on the larboard ſide towards Oeſell, and one third part on the ſtarboard ſide towards Ambrooke, there you ſhall haue about ſeuen fathome water, and ſoft clay ground. Towards the coaſt of Oeſel it is full of uneuen Dwaelgroundes; alongſt by the weſt ſide of Ambrooke you cannot lightly take hurte.

Arentsbergh lyeth from the ſouth ende of Oeſel northnortheaſt diſtant tenne leagues, but from the Iland Ambroeck north and by weſt four or fiue leagues. Vpon the weſt ſide of Oeſell the coaſt lyeth off from the ſouth ende unto Hondſorte, with divers bayes, about northnorthweſt and ſouthſoutheaſt ſixtteen leagues, betwixt them both lye two ladeplaces, Wyke and Reeck. Alongſt this weſt coaſt of Oeſell lye verie manie uneuen and foul grounds, whereof men muſt take verie good heede.

Arentsberg.

How these lands doe shew themselues at sea.



Coerland sheweth it self in this forme betwixt Lyseroort and Domesnes, when you saile alongst by it.

Thus sheweth the coaste of Coerland from Domesnes past Derwinda and the Backovens towards Der Liba.

When you saile about Domesnes then Oesel sheweth it self thus.

The Litle Iland Ambroeck.

The Iland Round when you saile alongst by it sheweth it self thus.

Round.

Thus sheweth Coerland to the eastwardes of Domesnes.

When you come against the mouth of the Duyn, the River of Rye, the land sheweth it self on both sides of it, thus.

How

For to saile from Der Liba,

How theſe lands doe lye one from the other, and from other lands.

From Derwinda to Lyſerorte northeaſt & by north — 4 leagues.
From Lyſerorte to Domeſnes eaſtnortheaſt and northeaſt & by eaſt 12 or 13 leagues.
From Domeſnes to Round eaſt & by north 8 le.
From Round to Duynemondt or the mouth of the river of Rye ſouthſoutheaſt, & ſoutheaſt and by ſouth — 16 leagues.
From Domeſnes to Rye or Duynemond ſoutheaſt — — 21 leagues.
From Duynemondt to Lemſael or Sales north and by eaſt — 12 leagues.
From Duynemond, or the mouth of the river of Rye to the Iland Kin north 13 or 14 leagues.
From Round to the Iland Kinne eaſtnortheaſt — — 10 leagues.
From Domeſnes to the ſouth ende, or the rode of Oeſell northweſt 3 great leagues.
From Domeſnes to Ambroeck north 5 leagues.
From Round to Ambroeck northweſt and by vveſt — — 8 leagues.
From the ſouth ende of Oeſell to Arentſbergh northnortheaſt — 10 leagues.
From Lyſeroorte to Howbrough weſt and by ſouth ſoutherly — 40 leagues.
From Lyſerorte to the point of Alandt or the Ilands northnorthweſt — 59 leagues.
From the ſouth pointe of Oeſell to Hondtſorte northnorthweſt, and north and by weſt — — — — 16 leagues.

CHAPT. V.

A Deſcription of the Coaſts of the Iland Dageroort, of the Moen ſound, and the norther part of the Baye of Rye.

HOndtſorte, the northweſt pointe of Oeſell, and the pointe of Dagherorte lye northnorthweſt, and ſouthſoutheaſt about 8 leagues diſtant. Betwixt them both is a greate baye, there runneth alſo a chanel through, but it is ſo ſhould, that no ſhips can go through, and all over ſharpe and uneuen ground. Upon Dagherorte ſtandeth a high towre which the Wor. Counſell of the towne of Revell cauſed there to be builded, for to knowe the land by, which men may ſee on both ſides of Dagerorte farre into ſea, and alſo may ſee it over the land farre in the foreſaid baye.

Towre upon Dagerorte.

Vnder the point on the ſouth ſide of Dagerorte is good lying for north & northeaſt winds and cleane ſand ground, you may ſound about by the point of Dagherorte in ſeuen or eight fa. thome, on the north ſide of the pointe is good roade for ſoutherly windes.

From Dagerorte to Syburghnes the coaſt lieth northeaſt ſeuen leagues. Betwixt them both, to wete, three leagues from Dagerorte, and four leagues from Syburghnes, lyeth a ground, going flat off thwart from the land northweſt into ſea, at leaſt fiue or ſixe leagues, almoſt in manner as the greate Iuttiſh riffe, is firſt of three, four, fiue, ſixe and ſeuen fathome deepe, and waxeth deeper by litle & litle towards the Finniſh Scheers, where at laſt it runneth to nothing.

About three leagues without the land of Dagerorte, north and north and by eaſt from the high towre, there lyeth a ſuncken rock which is verie ſteep, whereupon there is no more then tenne foot water: A man of Oſſaenen hath beaten upon it, which wente no deeper then eleuen foote and a half, preſently after the ſtroke he caſt the lead, and found fiue fathome depth. The Towre of Dagheroort was then from him ſouth and ſouth and by weſt.

Syburghnes is an outpoint, with two points, from each of which ſhooteth off a riffe, betwixt theſe two riffes is a faire flat ſand ſtrand, where you may ancker ſo neere the ſhoare as you will, in ſixe, fiue, or four fathome. Siburghnes.

A little to the weſtwards of the weſtermoſt point of Syburghnes, not farre from the land lyeth a ſhoulde under water, aboute ſo great as a ſhippe, whereupon it is not deeper then twelue foot.

From Syburghnes to Otges-holm the courſe is eaſtnortheaſt ſeauen leagues, betwixt them both goeth in the Moenſound.

To the ſouthwards of Otgens-holm goeth in a great baye into the land, wherein lyeth an Iland, and behinde it a little towne called Hapſael, there you may ancker where you will. On the ſouthweſt ſide of this baye, runneth off a greate ſhoulde or ledge of rocks at leaſt a greate league into the ſea, which is verie broade, you may runne in alongſt by it into Moenſound.

From Syburghnes to the Oxcholme & Graſholme the courſe is ſoutheaſt four or fiue leagues, the Graſholme are two little greene Ilands, and the Oxcholme lyeth aboute a league to the weſtwards of the Graſholm, about which you may ſaile, and ancker round about, a little league north and north & by eaſt from the Oxeholm lieth a ground looſe from the land, which you Oxcholme Graſholme.

Dageroort
Da: Syburch neß.
geroort
Daden
Ossenholm
W: grysgrondt
Otges holm
Hondswyck
Hondts oort
Grysholm
O: grysgrondt
Skadilsgrdt
Reecke
OESEL
Wyck
Abberburgh
Arensborgh
Gryß gronden
Moonsondt
Hapsael
't Slot van Moonsondt
Abrick
Aoensondt
Pater noster
Ranen
Kyn
Manno
Sorghholm
Parnout
Lemsael ofte Sales
Dytsche mylen 15 in een gradt.
Spaansche mylen 17½ in een gradt.
Eng: en Fr: mylen 20 in een gradt.
't Noorder deel vande Rÿghse Inham, de Meunsondt en 't Eylandt Dageroort.
24

you muſt avoide, called the weſter Graſground, there are two ſhouldes, which are called the Graſgrounds, the other Graſground, which is called the eaſtermoſt, lyeth over againſt the Graſholm, towardes the riffe of Hapſael, upon which there is no more then fiue foot water. He that will ſaile into the Moenſound, muſt take heede thereof.

Graſgrounds

He that will ſaile off from Otghenſholme through the Moenſound muſt goe on ſouth-ſouthweſt to the Graſholme, and ſail in cloſe by it, for to avoide the Graſground, which lyeth to the eaſtwardes over againſt it. From the Graſholme to the point of the Oeſel, where the great tree ſtandeth upon, the courſe is ſouthſoutheaſt ſeuen leagues. From the Graſholme towardes Oeſell lye four little Ilands, each aboute a league one from the other.

Moonſound.

When as you ſaile from Graſholme towards Oeſel, you muſt ſail alongſt by theſe litle Ilands, leaving them lying aboute two or three cables lengths on the ſtarboard ſide, untill that you come to the land of Oeſel, over againſt the great tree. In this farewaie it is fiue fathome deepe.

When as you come ſailing ſo alongſt paſt the Graſground, you ſhall meete with an Iland on the larboard ſide, to the northwards of it goeth in the Deepe unto the Caſtle of Moenſound in three fathome, but ſometimes it is ſhoulder, for there it is all full of ſands. To the ſouthwards of the ſame Iland goeth in another Deep, which you may ſaile through, untill you come to the ende of Oeſell, and then you leaue the two little Ilands by the ſouth ende of Oeſell, lying on the ſtarboard ſide. But the right and beſt Deep, goeth from the aforeſaid great tree, in alongſt by the land of Oeſell, which is three and four fathome deepe, and at laſt it will be ſixe, ſeuen & eight fathome: when you ſaile alongſt there, you leaue the foreſaid two little Ilandes by the ſouth ende of Oeſell lying on the larboard ſide. From the greate tree to the firſt little Iland the courſe is eaſtſoutheaſt fiue leagues; & then from the firſt litle Iland to the ſecond ſoutheaſt, and forth to the ende of Oeſell eaſt and by ſouth.

The Caſtle of Moone-ſound.

From that ende or northeaſt pointe of Oeſell runneth off a foul riffe, a greate half league into the ſea, called the Paternoſter, which you muſt avoide.

Paternoſter.

From this northeaſt pointe of Oeſell unto Parno the coaſt of Lyfland lyeth eaſtſoutheaſt and weſtnorthweſt.

When you come about that pointe, you may ſaile into the ſea or baye of Rye, where you wil, weſtſouthweſt to Arentſbergh, ſouthweſt or ſomewhat ſoutherly to Ambrooke, ſouth to Round, ſoutheaſt to Kinne, or where you will, the lying of Kinne is deſcribed here before.

From Kinne to Magno and Serckhollom all alongſt unto Parno, the courſe is northeaſt and by north eight leagues. Thwart of Magno and Serckhollom it is betwixte Coerland and the Ilands, fiue and ſixe fathome deepe, and alongſt Coerland altogether a faire ſtrand.

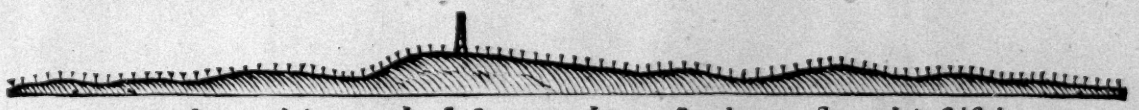
Magno. Serckholme.

Parno lyeth in a great Baye, It is there in the roade three and four fathome deepe. For to anker there, you muſt ancker ſo that the ſteeple of Parno ſtand northnortheaſt from you, there is the beſt roade.

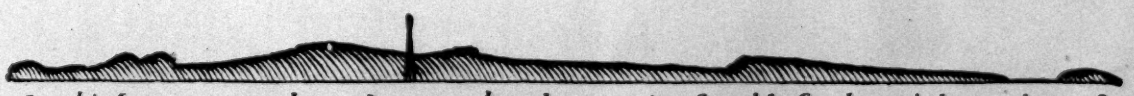
Parno.

How theſe lands doe ſhew themſelues at ſea.

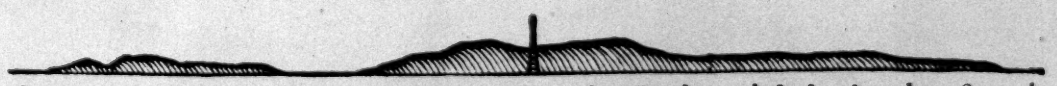
When Dagherorte is northnortheaſt four leagues from you it ſheweth thus.



Dagherorte being northeaſt from you three or four leagues ſheweth it ſelf thus.

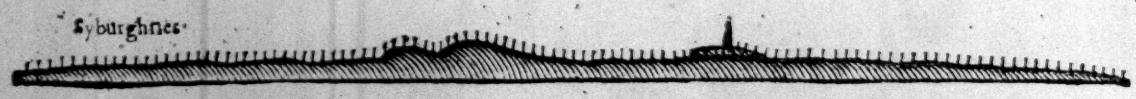


In this forme appeareth Dagherorte, when the towre is eaſt and by ſouth, and the northermoſt point is eaſt from you four leagues, and then you may euen ſee it in clear weather from below.

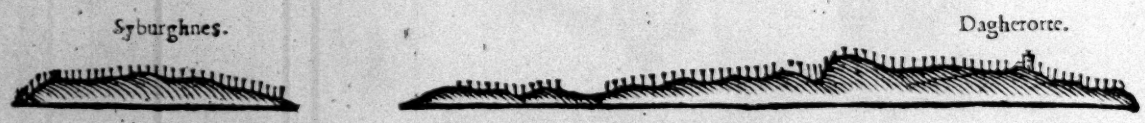


When as the towre upon Dagherorte is ſoutheaſt and by ſouth, and the land to the eaſtwards of it is ſoutheaſt four leagues from you, then it ſheweth it ſelfe thus.

When



When the towre of Dagheroorte is southsoutheast from you, then it sheweth it self (with the land to the westwards of it) thus.



Thus sheweth the land of Dagheroort towards Siburghnes.

How these lands doe lye one from the other, and from other lands.

FRom Hondsoort to the pointe of Dagherorte n.n.w. — — 8 leagues.
From Dagherorte to Syburghnes northeast — — 7 leagues.
From Syburghnes to the Oxeholme and Grasholme southeast — 4 or 5 leagues.
From the Grasholme to the great tree upon Oesell southsoutheast — 7 leagues
From the n.e. point of Oesel to Parno eastsoutheast about — 16 leagues.
From Arentsbergh to the northeast pointe of Oesell e.n.e. — 8 or 9 leagues.
From Ambroeck to the northeast point of Oesel northeast somewhat northerly 9 or 10 leag.
From Round to the northeast ende of Oesell north — — 13 leagues.
From Lemsael to Parno north and by east about — 9 leagues.
From Dagerorte to the Rose head southsouthwest — — 80 leagues.
From Dagerorte to Eastergore southwest — — — 37 leagues.
From Dagherorte to the Godtsche sand southwest and by west — 27 leagues.
From Dagherorte to Boechschaer west and by north — — 21 leagues.
From Dagherorte to the point of Alandt or the Ilands northwest and by north 20 leagues.

CHAPT. VI.

A Description of the Coasts of Lyfland betwixt Dagherorte and Revle: and also of Finland, lying to the northwards over against it.

Oetgensholm

OEtgensholme and Syburghnes lye eastnortheast and northeast and by east, and westsouthwest, & southwest and by west seuen leagues distant one from the other.
You may saile round aboute Oetghens holme, & also ancker under it, for northerly and northwest winds in sixe or seuen fathome.

Great Roge.

From Oetgensholm to great Roge the course is east and by north four leagues, betwixt them both, a little to the southwardes of the farewaie lyeth a shoulde euen aboue water, which you may saile round about, but you may not come verie neare it, becausse it is stonie and rockie round about it. Great Roge is an outpoint with two or three white chalck hilles, and thereby is verie good to be knowne. Betwixte this point and Oetghensholms somewhat more southerly lyeth another pointe, called Litle Roge, betwixt it and great Roge, goeth a broade Sounde into the land of sixe and seuen fathome depth, but in the ende it is shoulde. Thereaboutes it is all cleane ground, and good for to ancker in. Litle Roge.

From Great Roge to the Iland Narghen the course is east fiue leagues. When you sail from Great Roge towards Narghen, you shall finde four leagues to the eastwards of great Roge an other point with two white chalck spots, called Surp, betwixt it and great Roge, the land falleth awaie to the southwards, into a great baye. If you will saile to Revell, then sail alongst by that point of Surp, towards Narghen, leaving it on the larboard side of you, going on still east, until you come to the east end of Nargen. Being there by it, then goe on eastsoutheast a league and an half, and then you shall come by the end of the riffe, which lieth off from the Blote Karels, come no nearer it then in sixe fathome. When as the castle of Revle cometh without the Karels, then saile right unto the head of Revel, until you come Riffe of the Karels. Revle.

to

Little Reg

Riffe of a
Karcis.

Revle.

OOST FI

Hanga

Alito

Raßeborgh

Vallis

Mougard

Aboo

Rangma

Manetof

Corpi Sancti

Erke

Corpi Sancti

Wttorp

Duytsche mylen 15 voor een Graedt

Spaensche mylen 17½ voor een Graedt

Engelsche en Fransche mylle 20. in een Graad.

West Grasgront

Ossebolm

Grasholm

Oost grasgront

Eylandt van Dageroort.

Dageroort

I N L A N D T

De Zeecuſten van Liſlandt van Dageroort tot Revel en van Vinlandt daer tegen over

Eſtra

Lagerſa

Helſinga

Manetof

Eecanes

Vanes

Cuma

Rogo Vinlandt

't gat van Luys

Ekesondt

Kuiben

't gat van Elsenros

Sanam

40

35

30

25

20

Reuelſaer

Koexſchaer

Nargen

De wolf

Wranger

Clein Wranger

Ogesholm

Grot Rogge

Clein Rogge

Swin

Wolfsondt

Wolfs oort

Baltiſche Mareia

L I I F L A N D T

S. Brigitta clooſter

Hapſael

Revel

Moen sondt

25

to the east side, let your anker fall there, and then hall with the fore-ship or stearne, to the head, and make you fast by foure cables, for the north and northnorthwest windes which blow there flat open in, making it a lee shore, so that somtimes with such winds there commeth in a rowling sea.

East and east and by north about 4 leagues from the south end of Nargen, lyeth the Iland the Wolfe, which is about a league long.

Northnorthwest, and northwest & by north two leagues from the west end of the Iland the Wolf, and northeast and northeast and by east from the north end of Nargen lieth a rock under water, called the Revel-stone, although there be no more water upon it then 3 or 4 foot, yet it is in the Summer time with faire wether, oftentimes so smooth water, that it doth not break upon it, and it is also very steep, so that you may not come neerer it by your lead then in 12 fathom. The markes for to know the place of this Revel-stone are these. When the northeast end of Nargen is southwest and southwest & by west from you, and the high steeple of Revell is a capstone barrs length, or a litle more to the westwards of the west end of the Iland the Wolfe, then you are right thwart of this rock. The steeple of Revell is also then right south from you. But when the steeple of Revel cometh to the Wolfe, and that you are bound to the eastwards, then you are surely past this Revell-stone, and a good waies to the eastwards of it.

From the west end of the Iland the Wollfe lyeth off a riff to the northwards into the sea, about an English mile toward the Revelstone, upon the end of this riff lye 5 or 6 rocks a litle aboue water. If you come away from Revell on north & by west alongst by the Wolf, then marke the point of Surp, when that cometh even unto the south end of the Iland Nargen, then you shall also haue even the length of the foresaid riffe. If you looke out then on the starboard side, and be not sailed very farre alongst to the westwards of the Wolf, you shal see the foresaid rockes (lying upon the end of the riffe) lye thwart from you, & then you may run to the northwards about by them in 5 fathom without doing amisse.

Betwixt Nargen and the Wolf lieth also a stony showld which is very broad, but much neerer Nargen then the Wolf, and lieth from the south point of Nargen about northeast, and from the north point eastsoutheast. Therfore if you bring the south point of Nargen about southwest or southwest and by south, & the foresaid north point w. n. w. from you, and that the Wolf lye then free from the maine land, you shall not misse to fall upon this showld. You may saile round about Nargen, and also anker under it for northerly and westerly winds in 10, 12, 14, and 18 fathom. From Nargen to the Iland Wranger the course is east and by south 7 leagues. The lying thereof you may see in the chapter following.

Nargen.

Of the coast of Finland betwixt the Alandts Haffe and Elsenvos.

BEtwixt Vxe or Bostell on the coast of Sweden, and the Ilands of Alandt, goeth in the Alandts Haff, which men do call the North Bodem, which lieth up so farre to the northwards into Finland, that a ship with good fresh way should scarce be able to saile to the end of it in fiue dayes: upon the farthest end of this North Bodem lyeth the towne Toreu, there Sweden is parted from Finland.

Alandts.

At the outermost rocks of Finland on the Alandts Haff lye 3 Ilands, Ercke, Castelholm and Corpe. Ercke is the westermost of all, & the outermost, from thence goeth in the Corpesound, northeast alongst thwart of Castelholm and Corpe. Corpe lyeth within the other Iland, and from Corpe you may edge over into the Liet of Abbo, which commeth running off from Vttoy: you may also saile up into this chanell about behind Lipland, and so come out into the North Boden.

Ercke. Corpe.

Vttoy is a great Iland, upon it standeth a great mast with a barrell for a beakon, and lyeth from the Iland Corpe east and west about 9 leagues. On the west side of Vttoy goeth up the Liet of Abbo, which lyeth in first north & north and by east about 3 or 4 leagues, & then you come on against a great Iland. And then it lyeth in alongst that great Iland northeast unto the Sound of Abbo. Abbo lyeth at the end of that foresaid great Iland. This Liet runneth up alongst to the eastwards through betwixt the rocks, about 13 leagues within it lyeth a rock under water which is a Magnes or Load-stone, also the ground seemeth to be there of the vertue of the Lode-stone, for when you come thereabouts, the compasses doe not stand, but run and turne without any certain standing still, untill that you be at least a league past it, and then they begin to stand right againe. From thence it lieth east and east & by south all alongst through the rocks unto the Rough Iland, to the westwards of it runneth the chanel of Luys into the sea, when you are thwart of it at sea, you may see the land of Revel. It is there betwixt them both, to wit, betwixt the Out-roocks & Nargen, or

Vttoy.

Abbo.

Magnes.

Luys.

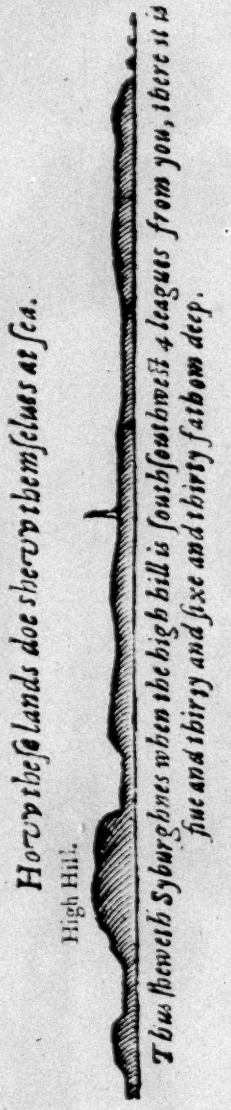
the land thereabouts ten leagues broad.

The Out-rocks of Luys, and the chanell of Vttoy lye eaſt and weſt about 21 leagues diſtant, although it be there betwixt them both all broken land, and full of rocks, yet nevertheles there are no havens nor chanels fit for ſhips to come into.

From Luys alongſt without the Rocks to the chanell of Elſenvos the courſe is eaſt and eaſt and by north 15 or 16 leagues, but Nargen or the Wolf, and the chanell of Elſenvos lye northnortheaſt and ſouthſouthweſt about 16 or 17 leagues aſunder. The lying whereof read in the chapter following.

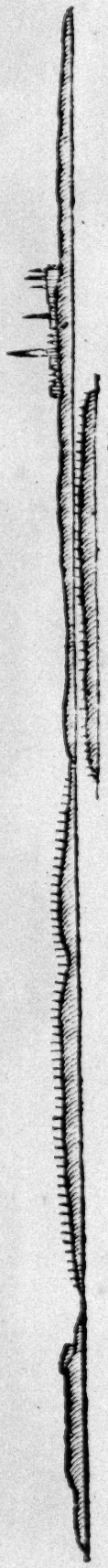
How theſe places lye one from the other, and from other lands.

FRom Syburghnes to Oetgensholm e. n.e. and northeaſt and by eaſt 7 leagues
From Oetgemsholm to great Roge eaſt and and by north 4 leagues
From great Roge to Surp eaſt 4 leagues
From Roge to Nargen eaſt 5 leagues
From the ſouth end of Nargen to the Iland the Wolf, eaſt & eaſt & by north 4 leagues
From Revell to the Wolfe north and by weſt — — — 5 leagues
From Oetgensholme to the out rocks of Luys north and by eaſt 15 or 16 leagues
From Syburghnes to the chanell of Abbo, or Vttoy northweſt 20 leagues
From Vttoy to Ercke the outermoſt Iland of Alandt weſt 9 leagues
From Vttoy or Abbo to the chanell of Luys the courſe is eaſt 21 leagues
From Luys to the chanell of Elſenvos eaſt & eaſt and by north 15 or 16 leagues
From Nargen to the channell of Abbo the courſe is weſt & by north 32 or 33 leagues
From Nargen or the Wolfe to the chanell of Elſenvos northnortheaſt 16 leagues
From Nargen to the Out-rockes of Luys northnorthweſt 13 leagues
From the Wolfe to Peltingſchares northeaſt ſomewhat eaſterly, or northeaſt and by eaſt 20 leagues
From the chanel of Abbo to Boeſchaer ſouthweſt and by ſouth 16 leagues



Thus ſheweth Syburghnes when the high hill is ſouthſouthweſt 4 leagues from you, there is 25 fine and thirty and ſixe and thirty fathom deep.

Horw the theſe lands doe ſherw themſelues at ſea.



Thus ſheweth Revell when you are by the Revelſtone without the Wolfe

The ferme of Oetgens-holme.

OOST VI

Parna

Fromal

Ellenvos

Borgo

Peltingh

De Tocken

Kalkoen

't gat van Ellenvos

Santam

Melij

Peltingsondt

Peltingscharen

Evlandt met de stengh

Kalcgrondt

Kocxschar

Wranger

Clein Wranger

Lechholm

Schmnckewyck

'Duytsche mijlen 15 in een graad

1 2 3 4 5 6 7 8 9 10 11 12 13

Engelsche en Fransche mijlen 20 in een graad

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

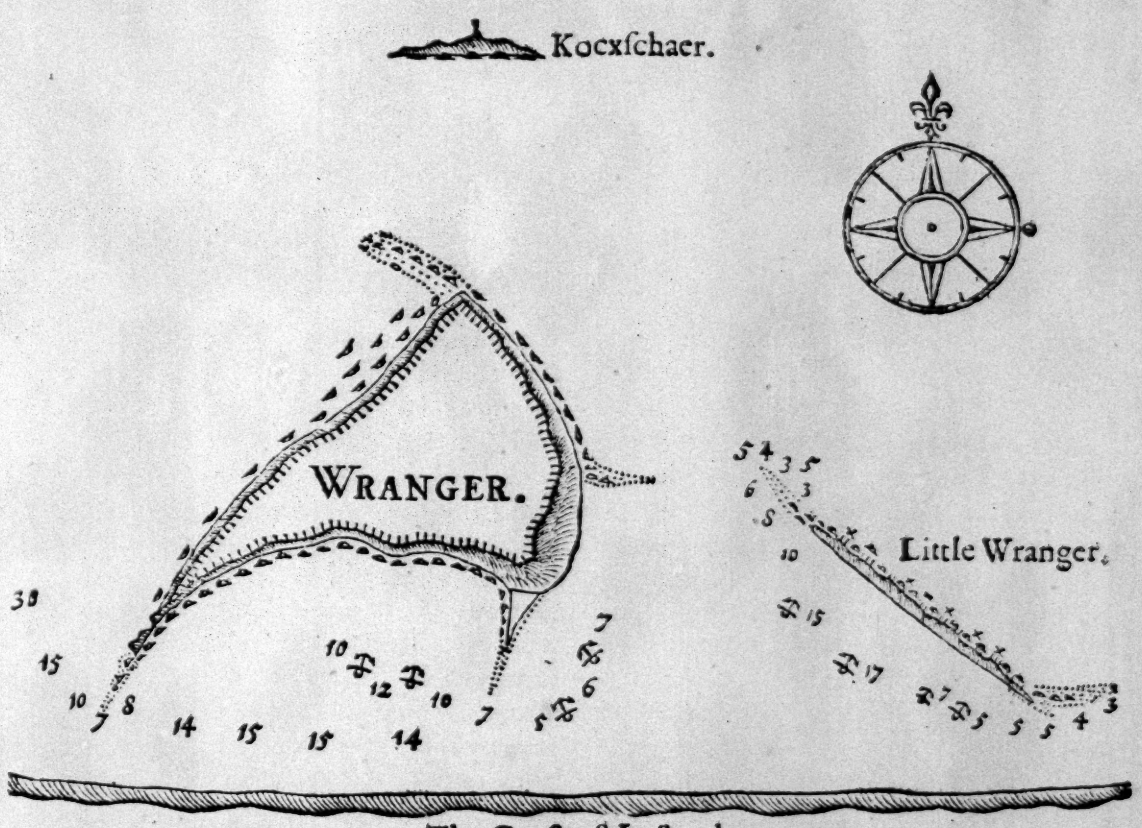
Spaansche mijlen 17½ in een graad

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Wyborgh
Rohel
Vermax
Vekelax
Olsby
Hettes
C. Vyssher
Goeschaer of Groote Visscher
Quade Schaere
Esbel schaeren
Nerva
Sommers
Hooge landt
Rutte sarre
RVSLANT
Castram
Russe haecken
Grote Tuijers
Hoge land van der Narva
LIFLANDT
Der Narva
Pascaarte vande Lijfland: sche zee, van Re: vel en Elsenvos tot het uijterste der Oost-zee.
26

CHAP. VII.

A deſcription of the coaſts of Lyfland, Ruſland, and Finland betwixt Revell and the furthest of the eaſt ſea.



The Coaſt of Lyfland.

THE Iland Wranger lyeth from Nargen eaſt and by ſouth, diſtant ſeven or eight leagues, and three leagues eaſtſoutheaſt from the Wolf. Vnder Wranger is on both ſides good road and good ancker ground, eſpecially on the ſouth ſide, where there is a Bay, there you may ancker betwixt the two points in 10, 12 or fourteen fathom, according as ſhall bee convenient, and lye ſheltred for a northeaſt and eaſt, and alſo for a northweſt and weſt winde. You may ſaile round about VVranger, but from ſome poynts (as from the two ſouth points, and from the north poynt) lye off ſome litle riffes, whereof you muſt take heed, and be carefull in uſing the lead when you ſaile about by them. Wranger.

About an Engliſh mile from VVranger lyeth little VVranger, a little long ſmall Iland, lying about northweſt and ſoutheaſt, which is rocky and foule, eſpecially on the northeaſt ſide. From the ſoutheaſt point runneth off alſo a rocky riffe whereof you muſt take heed. Little Wranger.

On the ſouthweſt ſide is good anckering for northeaſt and eaſt windes, ancker under it ſo that the ſoutheaſt point lie about eaſt from you, there is good lying for northeaſt and eaſt windes.

From the northweſt point runneth off alſo a little riffe, which you may ſound about in foure, fiue, or ſixe fathom, according as your ſhip goeth deepe, when as you will goe to ancker there, comming from the northwards, or about to the northwards of the Iland.

About a great league north from the eaſt end of VVranger, and two litle leagues north and by weſt from little VVranger, lyeth a litlland, which by ſome is called Kuycken, but commonly is called the Kocxſchaer, which is a little bare rock with a VVarder upon it, you may ſail round about it on both ſides, it lyeth from the VVolf northeaſt and by eaſt diſtant two great leagues. Kocxſchaer.

From VVranger to Eckholme the courſe is eaſt and eaſt and by north thirteen leagues. Three leagues by weſt the Eckholmes lyeth an out-poynt, to the eaſtwards of it is a Bay called the Monck-wyke, there it is good Monckwyke

anckering for ſouthweſt and weſt winds in 8, 10 or 12 fathom. Betwixt this point of the Monckwyke and Wranger, lye three little long Ilands, lying alongſt the coaſt of Lyfland, about a halfe league from the ſhore, which are very foule and rocky, and almoſt nothing but rockes, whereof you muſt take heed, otherwiſe the coaſt betwixt them both is cleane.

Eckholm. The Iland Eckholm is cleane round about, and lyeth about northweſt and ſoutheaſt, it ſheweth it ſelfe high at both ends, and in the middeſt with a valley. Vnder Eckholme is good anckering at the northeaſt ſide for weſt and ſouthweſt winds in 20, 22, and 25 fathom, and on the ſouthweſt ſide for eaſterly winds.

Telsburgh. Fiue leagues to the eaſtwards of Eckholme lyeth the caſtle Telsburgh, thwart of it lyeth off a ſhowld from the ſhoare, but you may ſound it in 8 or 9 fathom. From thence the coaſt lyeth alongſt moſt eaſt and by ſouth unto the road of the Narve about 16 leagues, it is altogether cleane without fowle ground, ſo that you may alſo ſail alongſt there by night in 8 or 9 fathom without feare.

Northwardes from this coaſt in the fareway betwixt Eckholm and the Iland of Highland, lie the Chalck-grounds, Hoftes, the litle and great Tutters, all of them with very dangerous foule grounds and ſholds. Eckholm & Highland lye northeaſt and ſouthweſt diſtant about 11 or 12 leagues. About 2 or 3 leagues eaſt and by north, or eaſtnortheaſt from Eckholme, and alſo two leagues from the maine land lye the Chalck-grounds, which are foule grounds almoſt three leagues long under water, and lye to the weſtwards weſtnorthweſt into the ſea, and to the eaſtwards almoſt to the riffes of the Hoftes. Some ſay that they are faſt to it, ſo that you ſhould not be able to ſaile through betwixt them.

Chalck-grounds.

Hoftes. The Hoftes lyeth eaſt and by north from Highland about fiue or ſixe leagues, which is a long ſmall Iland foule round about, with two fowle riffes that lye out, the one lyeth off ſomewhat to the eaſtwards, and the other to the weſtwards unto the Chalck-grounds.

Northwards from the Hoftes lye the little Tutters, and two leagues to the eaſtwards of the litle Tutters lye the great Tutters.

Litle Tutters The little Tutters are two Ilands not high, but round about rocky, riffy, and fowle, they lie ſouthweſt and by ſouth about three leagues from Highland.

Great Tutters. The great Tutters lye from the little Tutters eaſt about two leagues, and from Highland ſouth and by eaſt alſo two leagues, there lyeth off from it alſo a great ſtony riffe weſtwards towards the litle Tutters: there lyeth alſo betwixt the litle and great Tutters a row of rockes, whereof you muſt take heed when you will ſaile through betwixt them.

Southeaſt and by ſouth about two leagues from the great Tutters lyeth a ſhowld of fiue fathom. He that will ſaile to the ſouthwards of theſe foreſaid Ilands and ſhowlds towards the Narue, may be mindfull thereof, it lyeth about foure leagues to the eaſtwards of Telſburgh, two or three leagues from the ſhore.

Showld. Betwixt the great Tutters and Highland lyeth a ſhowld vpon which there is no more then ſixe foot water.

Southeaſt a great halfe league from the ſouth end of Highland lyeth another ſhowld of a fathom and halfe and two fathom deep.

Iland with the Maſt. To the northwards of all theſe foreſaid rocky Ilands and fowle ſhowlds, lieth a little Iland whereupon ſtandeth a Maſt for to know it by, and to diſcerne it from the other litle fowle Ilands, that you may come indifferent neare to, but not too neare, for it is alſo ſomewhat rocky and fowle, but not farre off, it lyeth from the litle Tutters weſt and by north about two leagues, from the Iland Highland ſouthweſt and by weſt at leaſt foure leagues, but from VVranger or the Kocxſchaer eaſt and by north 20 leagues.

He that will ſaile off from VVranger towards the Narve alongſt to the northwards of theſe foreſaid grounds, and doe get ſight of this litle Iland with the maſt, may therby the better know to direct his courſe, but it is not wiſdeome to ſaile through theſe foreſaid ſhowlds, except for them that are very there wel acquainted.

Highland or Hogland. The Iland Highland, or Hogland, is about 3 leagues long, and not a league broad, lying ſouthſoutheaſt and northnorthweſt. VVhen you come out of the weſt, it ariſeth in 3 hommocks, ſo high to look to as Coll in the Scaw reach, upon the north end and vpon the eaſt ſide it doth ſtand all full of trees. A little about the north point on the eaſt ſide is a little bay thwart of a Boers houſe, there it is cleane ground, and good lying for weſterly & ſouthweſt winds, ſomwhat to the ſouthwards of it, not very far from the ſhore, lieth a great rock aboue water. At the north end is alſo good lying for a ſoutheaſt wind. Alongſt the ſouthweſt ſide you may alſo ancker every where in 16 17, or 18 fathom cloſe by the land for eaſt and northeaſt winds.

From the ſouthweſt ſide of Highland unto the roade of the Narve, the courſe is ſoutheaſt about ſixteen leagues, and then you run through

through betwixt the Highland and the Tutters.

Likewiſe when as you ſaile on northweſt from the roade of the Narue, then you run alongſt betwixt the Tutters and Highland, but you muſt be very careful, and take heed of the forſaid ſhowlds, which ly betwixt them both.

The Narue. The land of the Narue men do know by 3 high hills, lying a league to the weſtwards, or to the ſouthwards of the roade, and a league further to the weſtwards ſtand ſome litle houſes upon the high land.

The towne of the Narue lyeth upon a river about two leagues within the land. For to ſaile in there men were wont to look out for a long hill, which lyeth on the ſouth ſide within the rivers mouth, and at the eaſt end goeth downe ſomewhat ſteep, with ſome high trees to the eaſtwards of it, then they brought the woodden tower of the Narue to the northwards of the foreſaid trees, and did run in ſo with it. When as the eaſtermoſt of the 3 foreſaid hils (a league to the weſtwards of the rivers mouth) came over a little hommocke which lyeth on the water ſide, then they were upon the barre of the rivers mouth, there was upon the ſhowldeſt ten foot water, and then they ſailed up the river; that was wont (for ſome years) to be ſo, but it is poſſibly ſince that time more or leſſe altered, like as it doth oftentimes happen in ſuch rivers.

Ruſſe haecks From the road of the Narue to the Ruſſe haecks the courſe is northnorthweſt fiue leagues, which lye with many rockes a good wayes off from the ſhore. The point thwart of it is called the point of Caſtrum after a little town (ſo called) lying there.

Rette Sarre. From the Ruſſe-haecks northnorthweſt 5 leagues lyeth a litle Iland called Rette Sarre, from which there runneth off a riff ſouth into ſea. From this Iland, or a league to the weſtwards of it unto the Summers the courſe is ſouth and north 4 or 5 leagues.

Slimme-grounds. Eaſtſoutheaſt from Highland, and 3 leagues from the Ruſſe huecks lyeth another ſhowld called the Slimme-grounds, it lyeth long & ſmall alongſt northnorthweſt and ſouthſouthcaſt, with hard wind you may ſee it breake at foure or fiue places: when it is weſt from you about halfe a league, there it is two fathom deep to three, foure, fiue and ſixe fathom, vneven ground, ſome of the rockes of it lye alſo aboue water.

From the Ruſſe haecks to the Rode-hell the courſe is northeaſt and by north about foure and twenty leagues, betwixt them both on the Ruſſe ſide, runne alſo divers rivers into the land, but there is no trade. The land there lyeth in a great bight, it lyeth firſt from the Ruſſe-hackes vnto the River of Nioa, or Oreſchacke eaſtnortheaſt about thirteen leagues, there parteth Ruſland from Finland by a great Meer, or water, called the Ladingh. The Lading.

The ſtrong caſtle of Noetenburgh lyeth there alſo upon a river which lieth out of the Lyflands or eaſt ſea into the foreſaid Lading. Further the land lyeth northnortheaſt, and north and by eaſt about thirteen leagues unto the Rode-hell.

For to ſaile from Revell to Wyburgh.

FRom a little to the northwards of the Kocxſchaer to Highland the courſe is eaſtnortheaſt a little more eaſterly 23 leagues, with that courſe you runne alongſt a litle to the northwards of it. You may ſaile about Highland on both ſides, but alongſt to the northwards of it is the right fare-way for thoſe that are bound to Wybrough. A halfe league north and by weſt from Highland lyeth a ſuncken rock under water. For to avoid it you muſt ſaile cloſe alongſt by Highland. Further, the lying of Highland hath been deſcribed here before.

Summers. From Highland to the Summers the courſe is eaſt & by north 7 leagues. Sommers is a rock or litle Iland almoſt like the Eartholms, it ſheweth it ſelfe in 3 hommocks. A litle to the eaſtwards of it lye ſome rocks aboue water: you may ſail about on both ſides of Summers, and alſo through betwixt Sumers & the foreſaid rocks that lye to the eaſtwards of it: but about to the northwards of it is the right fareway, you cannot alſo run alongſt farre to the northwards of it, for a halfe league to the northwards of it, it is very fowle & full of litle rocks, ſome aboue and ſome under water.

Goeſchaer, or great Fiſher. From the Summers to the Goeſchaer the courſe is n. e. or ſomwhat more eaſterly ſeven leagues. The Goeſchaer which by ſome is called the great Fiſher is a long & broken Iland of 7 rocks, therfore it is alſo called the Sevenrocks, it lieth not far from the land, ſo that you cannot get ſight of it, before that you come neare it, it ſheweth it ſelfe when you ſhal firſt ſee it, in 4 hommocks, as if it were 4 litle low Ilands, you muſt leaue it lying a halfe league on the larbord ſide, for to avoid a ſuncken rock which lyeth off from it ſ ſ e. a great ſhot of a caſt peece. When the water is not very ſmooth, but a litle grown, you may perceiue it by the breaking of the water: you may alſo well ſail to the northwards of this ſunken

rock, to wit, through betwixt the ſuncken rock and the Goeſchaer, then you muſt run indifferent cloſe alongſt by Goeſchaer; when it is northweſt and by north from you, then you are paſt the foreſaid ſuncken rock, whether that you run alongſt to the northwards or to the ſouthwards of it.

Litle Fisher From the Goeſchaer or great Fiſher to the little Fiſher, the courſe is northeaſt and by eaſt three leagues. The little Fiſher is a bare round rock which lyeth not farre from the land: when you come neere it; you may know it well from the other rockes, becauſe there lye none ſo farre from the land alone, you may ſaile about it on both ſides, but alongſt to the ſouthwards of it is the right fare-way. About a ſhot of a caſt peece ſoutheaſt, or ſoutheaſt and by eaſt from this little Fiſher, lyeth a black rock with the top even aboue water, almoſt like a buye upon the Flye-ſtreame, to ſee to a farre off as if it were a Seales head. This rock you muſt leaue on the ſtarboard ſide, and run through betwixt it and the fiſher.

Hee that muſt turne to windwards hereabouts, let him not come very neer this rock, for men doe hold that there lye more rockes by it under water.

Both the Fiſhers are otherwiſe clean round about, ſo that you may alſo finde road under them.

Corſnes. From the little Fiſher to the point Corſnes, which the Lubickers doe call Kruyſoort, the courſe is eaſtnortheaſt ſomewhat eaſterly a league. Corſnes is a point going off low of the maine land, not very cleane, which you muſt leaue on the larboard ſide. To the weſtwards of Corſnes lye two little Ilands cloſe to the land. Thwart of the point lyeth a rock, almoſt like a litle boat, you may run about by it in foure fathom and a halfe, but not nearer. On the eaſt ſide of that point you may anker for weſterly winds in 5 or 6 fathom.

About two leagues thwart off from Corſnes, lye very many rockes, ſome one fathom, ſome a halfe fathom, ſome more, and ſome leſſe under water, you may not goe out of the fareway without great feare and danger. It is impoſſible to deſcribe al the uneven grounds, the great multitude of rocks & rocky ſhowlds which are lying thereabouts.

Rode-hell. From Corſnes to the Iland Rodehell the courſe is northeaſt and by north about three leagues. Rodehell is a great rough Iland with a ſaddle in the middeſt, which you muſt leaue lying on the ſtarboard ſide. The north point is a red point, there ſtand up long ſtaues over end, like unto a Warder in Norway, you muſt goe cloſe alongſt by them, or you may runne in amidſt the chanell, according as ſhall bee beſt convenient, but you may not goe cloſe by the north point over againſt it (which the Dutch Schippers doe call Iam Lambertſons point) becauſe of a ſtony and ſteepe little riff which lyeth off from it, but you may runne about by it upon your lead in ſeven or eight fathom, but may come no neerer; the right fare way betwixt them both is foureteene and fifteen fathom deepe.

Betwixt the point of Corſnes & the Rode-hell, it is not without danger to turn to windwards, eſpecially you muſt be very careful not to run too farre over to the ſouthwards, but to the northwards, towards the maine land it is indifferent cleane: it is there in the fareway 15 fathom deep, ſoft clay ground.

For not to miſſe this foreſaid chanel, or the north point of the Rode hell, then take mark out a ſtearne of the little Fiſher, bring that even without the point of Corſnes, and keep it ſo ſtanding ſailing towards the Rode hell, and ſo you ſhall not faile to fall right before the chanell. This is a ſure marke whereupon you may truſt. If you fall ſomewhat to the ſouthwards of the foreſaid channell, you can ſee no opening, but ſeemeth to be all whole to the maine land, ſo that men (that are not well acquainted) might not know where to ſeek the chanel, but ſailing to the northwards the chanell doth open it ſelfe.

VVhen as you ſhal be then within the foreſaid point of Rodehell, you may anker there where you pleaſe, and fetch a Pylot from the land, which may bring you up to the towne VVybrough. It is there within fifteen fathom deep, and good ſoft clay ground.

If you will (being come within the Rode-hell) ſaile up to VVybrough, then goe on eaſt & by ſouth a ſhot of a caſt peece unto a black point, leaue that about two cables lengths on the larboard ſide, for there it is not cleane. Being a little paſt this black point, then go on northeaſt, or eaſtnortheaſt a halfe league, and then you ſhal come againſt a great white ſandbay, but before you come by this ſandbay you ſhal meet a rock with a gray ſtone like a buye upon the Fly-ſtream, leaue that foreſaid rock on the ſtarboard ſide, and the gray ſtone on the larboard ſide, and run amidſt the chanell through betwixt them both, there it is three fathom deepe. It is no wiſedome to ſaile up there for him that hath not beene there before, but it is beſt to ancker a little within Rodehell, and to let him be brought up by a Pylot.

The Coast of Finland betwixt Elsenvos and Wybrough.

THe Chanell of Elsenvos lyeth from Nargen or the Wolfe northnortheast and southsouthwest about sixteene or seventeen leagues, and from Wranger south and north.

Vpon the west side of the chanell lyeth a high round rocke, whereupon standeth a mast, or Warder, called Kubben, over against upon the other side of the chanell lyeth a long rocke or Iland called Sautum, and an halfe league to the eastwards of Kubben lyeth another great round rock called Mely. These three rockes are the best markes to be known of this foresaid chanell.

Kubben

Sautum.

Mely.

Betwixt Kubben and Sautum lyeth that chanell in from thence northeast, untill that you bee within the rockes, and then northnortheast and north and by east, untill you come before the river of Elsenvos, there you may ancker betwixt the rockes in good anckerground.

Elsenvos.

There runneth also a Liet through within the rockes, where you may saile alongst, and come out againe into the sea by Putsfagre, this runneth about very crooked with many bights, but it is Pilots water.

If you will saile to Borgo, then runne a league to the eastwards of the foresayd rock Mely, there you shall finde two high bare rockes, called the Tolcken, runne in betwixt them both, but neerest to the eastermost, which is cleane and cleare close to it, and lyeth somewhat further to seawards then the westermost. Westnorthwest from this eastermost high rocke, lyeth a little rocke aboue water, leaue that on the larboard side. When as then you shall be by this eastermost rock, which you leaue lying on the starboard side of you, then goe on northnortheast to Schoeland, that is a rough Iland off from which lye many bare points, all which you must leaue (with the Iland also) on the starboard side, then runne alongst close by these bare points. When you are past them, goe then northeast and by north somewhat easterly, and so you shall see two other bare rockes, the eastermost of the greatnesse of a shippe very steepe and high, but the westermost is small, runne in there betwixt them: the Sound is called Cramer-poort. VVhen you are within them, goe then in north and by east, and then you shall presently meete with a great Iland called Cramer, leaue that on the starboard side, and so you runne right on with an other great Iland, called the Hester, leaue that on the larboard side, and ancker betwixt the two Ilands Cramer and the Hester, there is good ancker ground.

Borgo.

Cramer-port.

Cramer.

The Hester.

From the mouth of the Sound of Elsenvos to Peltingsound the course is east, and east and by south eleven or twelue leagues. Peltingsound lyeth in northeast, there you lye within a great many great rockes, or little Ilands, sheltred for all windes. You may sayle from thence through within the rocks all over where you desire to be, if you haue a good skilfull Pilot.

Peltingsound.

From Peltingschares to Putsfagre it is fiue leagues. Putsfagre is a great rock, or Iland, lying from Highland north and by west distant fiue or sixe leagues. About a league south from this Iland Putsfagre lyeth a suncken rock, which you must avoid. Hee that will saile through within the rockes, let him take a Pylot from Putsfagre, that may bring him through the rockes where hee desireth to be: you may runne in there every where, and within the rockes it is most all over good ancker ground.

Putsfagre.

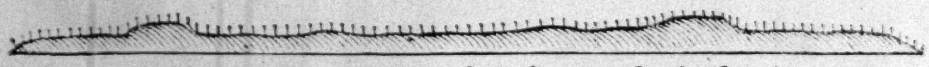
From Putsfagre to the Epelschares the course is east seven leagues: these are a great many out-rockes, a little to the eastwards of them lyeth a great rocke called Quadeschare which you may saile round about.

Epelscharen.

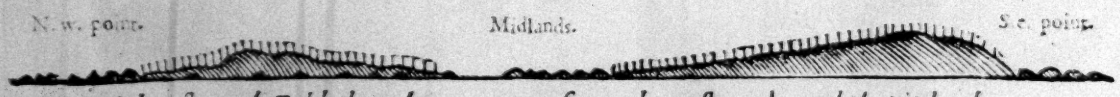
From Epelscharen to the Goeschare the course is eastnortheast tenne leagues. That, and the lying of the land, and dangers from thence eastward, hath beene described here before.

Goeschare.

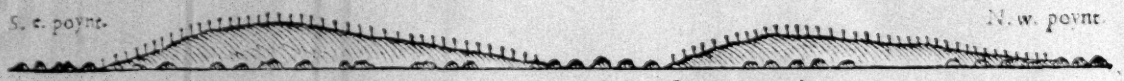
Howv theſe Lands doe ſhevv themſelues at ſea.



The Iland Wranger ſheweth thus when it is ſoutheaſt and by eaſt three leagues from you.

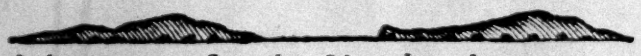


Thus ſheweth Eckholm when you come from the weſtwards, and that it lyeth to the eaſtwards frow you.



Thus ſheweth Eckholme when you come from the eaſtwards, and that it is to the weſtwards from you.

In this forme ſheweth the Iland the Huſtes, when you are to the ſouthwards of it, and ſaile alongſt by the coaſt of Lyfland.



The little Tutters ſhew themſelues thus when they lye to the northwards from you.

Thus ſhew the great Tutters when you ſaile alongſt by the coaſt of Lyfland and that they lye to the northwards from you.

Thus ſheweth the land to the eaſtwards of the rivers mouth of the Narve, when you come thereabouts comming off from the High land.

In this forme ſheweth the land to the eaſtwards of the Narve, when you come off from the High land.

Thus ſheweth the Iland Highland, when you ſee it comming from the weſtwards.

Howv

SCHONEN

Ahuys

Boere kerck

Verwallen Casteel

Bosch

Goesbeer

Santhamer

Somerhaven

Selsborgh

Elsholm

Hanneu

Malqueren

Rottenburg

Slot

Sand
wick

Borholm

Swanex

Certholms

Der Schagen

Duytſche mijlen 15. in een Graadt

Spaanſche mijlen 17½. in een Graadt

Engelſche en Fr. mijlen 20. in een Graadt

De Cuſten van Schoonen en Sweden tuſſchen Bornholm ofte Sandthamer en Calmer

SWE

DEN

Stuboon

Christianopolis

Berecker haven

Holmes grondt

Steenſse

Slot

Calmer

Gven Eylandt

De Huitleggers

Holmes grondt

Steenſse

Grimſchaer

't Zuydeynde van Oelandt

Capel op Zuyderoonden

Zuyderoonden

27

How these places are lying one from the other, and from other lands.

From the Iland the Wolf to Wranger eastsoutheast — 3 leagues.
From the Wolf to the Kocxschaer northeast and by east — 3 leagues.
From the Kocxschaer to the east ende of Wranger south — — 1 league.
From the Kocxschaer to litle Wranger south & by east — — 2 leagues.
From Wrangher to Eeckholm east and east and by north — — 13 leagues.
From Eeckholme to the Castle of Telsburgh east — — 5 leagues.
From Telsbrough to the road of the Narve east and by south — 16 leagues.
From the road of the Narue to the Russe haecks northnorthwest — 5 leagues.
From the Russe haecks to the River Nioa, or Oreschack eastnortheast — 13 or 14 leagues.
From Oreschack to the Rodehell north and by east — — 15 or 16 leagues.
From the Russehaecks to the Rodehel northeast and by north — 27 leagues.
From the Russehaecks to the Iland Rette Satre northnorthwest — 5 leagues.
From Rette Satre to Sommers north somewhat easterly — — 4 or 5 leagues.
From Eeckholme to the Iland Highland northeast — — 11 or 12 leagues.
From the west side of Highland to the roade of the Narve southeast — 16 leagues.
From High land to the litle Tutters southwest and by south — — 3 leagues.
From High land to the great Tutters south and by east — — 3 leagues.
From the Iland with the mast to the litle Tutters east and by south — 3 leagues.
From the Kocxschaer to the Iland with the mast east and by north- — 20 leagues.
From the Iland with the maste to Highland northeast and by east — 4 leagues.
From the Koxschaer to Highland eastnortheast somewhat easterly — 23 leagues.
From Highland to the Sommers east & by north — — — 7 leagues.
From the Sommers to the Goeschaer or greate Fisher northeast somewhat easterly 7 leag.
From the greate Fisher to the litle Fisher northeast and by east — 3 leagues.
From the litle Fisher to Corsnes eastnortheast easterly — — 1 league.
From Corsnes to the Rodehell northeast and by north — — 3 leagues.
From the Sound of Elsenvos to Peltingsound east, and east and by south 11 or 12 leagues.
From Peltingsound to Putsfagre e. & by n. 5 le.
From Putsfagre to the Epelschaers east 7 leag.
From the Epelschaers to the Goeschaer or great Fisher eastnortheast — 10 leagues.
From Eeckholme to Elsenvos northwest — — — 16 leagues.
From Highland to Peltingschares westnorthwest — — 8 leagues.
From Highland to Putsfagre north and by west — — — — 7 leagues.

CHAPT. VIII.

Of the Coasts betwixt Bronthollom or Sandhammer and Calmer.

Shoalde by Bronthoim.

BEtwixt the north pointe of Bronthollom and the point of Sandthammer, but nearest to Bronthollom lyeth a shoulde of sixe fathome, where sometimes Fishermen doe lye to fish, it is not verie greate, but harde stonie ground.

From Sandthamer the coast lyeth northeast and by north a league to Somerhauen, this is a round bay, within it is verie good anker ground. From thence the coast lyeth about north 5 leag. unto Ahuys. From the north pointe of Bronthollom to Ahuys the course is north & by west somewhat northerly about ten leagues. But to Hanno north, somewhat westerly, betwixte eleuen or twelue leagues.

Ahuys lieth upon a river, where sometimes is before the towne 10 or 11, and sometimes also no more then four or fiue foot water, according as the water cometh off out of the land, upon it is a great fishing, where in the sommer time, are great store of good Eels taken. To the eastwards of the mouth of the river runeth off a stonie flat from the shoar, & to the southwards of the river a foule stonie riffe, right off from the shoare alongst by the foresaid flat, so that there lyeth in a channel betwixt the foresaid flatt and the riffe, which is called the Eastergat. Ahuys.

Through this foresaid riffe lyeth in a channell untill into the Eastergat, on against the flatte, which is called the Southergat. If you wil saile into this southergat, comming from the southwards, then run to the west shoare to the southwardes of Ahuys, untill you come in 5 or 6 fathome, and then you shal see upon the north shoar, n. & by w. or somewhat more westerly

from you, a cape or beacon ſtanding a litle from the ſtrand within the land, of faſhon like a mill without wings: Bring this beacon to the weſt ſide of the high hill, which lyeth ſomewhat further into the land, to wete, euen in the going off of the higheſt of the hill, keepe theſe markes ſo ſtanding, and ſaile in right with them, until that Ahuys commeth over that tree, which ſtandeth there at the north ende of the wood; or that the white Countrie-church come to the northwards of the litle houſes of Ahuys, then goe on northweſt, or bring that foreſaide white countrie church in a little valley, a litle to the northwardes of an olde ruined caſtle, (whereof there ſtandeth yet ſome of the walles, upon the north ſide of the River) and ſayle ſo on, untill that Ahuys come to ſtand in the middeſt of the River, ancker there in two fathome and an halfe, or three fathome, there is the roade, there can goe no ſea. In this ſouther gatt it is two fathome, two fathome and an half, and ſometimes alſo at leaſt three fathome deepe.

Eaſtergat of Ahuys. For to ſaile into the Eaſter gatte, comming from the ſouthwards, keepe in ſixe or ſeauen fathome, and runne ſo to the north ſhoare, and then you runne alongſt without the riffe, that lyeth off by ſouth the Rivers mouth, from the weſt ſhoare, untill that Ahuys doe ſtande right weſt from you, then there commeth a greate tree to the north ſide of the wood, that ſtandeth upon the weſt ſhoare, keepe that ſo ſtanding and run in right with it, untill that the foreſaid countrie Church come to that aforeſaide olde peece of wall, of the olde ruinous Caſtle, and then right in, as hath beene before ſaid. Or runne in by the firſt markes, until within a ſhot of a caſt peece neare to the weſt ſhoare, and then edge up to the north ſhoare, untill that Ahuys come in the middeſt of the River, and ancker there, as hath been ſaide.

Hanno. Hanno is a litle high round Iland, which men may ſayle rounde aboute, under it is good roade for ſouth and ſoutheaſt windes.

Behinde Hanno runneth up a little River to Selſbrough, but ſerveth onely for ſmal ſhippes or Crayers, which goe not deepe.

From Ahuys to the Rockes the courſe is eaſt and by north twelue or thirteene leagues, betvvixte them both lye divers little townes, Eleholme. Rottenbuy. as Eleholme and Rottenbuy, where men may ancker before, in ſixe, ſeuen and eighte fathome good ancker grounde: and other Havens more, but little or nothing knowne by Hollanders. Thwarte of Rottenbuye lyeth a greate Rock ſomewhat off from the lande, called Malqueren, under which men may alſo ride.

From the north pointe of Bronthollom to the Rockes the courſe is northeaſt ſixteene leagues, but from the pointe of Sandhammer northeaſt and by eaſt ſeuenteene leagues. If you runne alongſt cloſe by the north pointe of Bronthollom, you ſhall runne with a northeaſt waie, alongſt euen without the Rockes: But, if you runne alongſt cloſe by the pointe of Sandthammer, and will ſaile from thence to the Rockes, you ſhall with a northeaſt and by eaſt waie fall with the land euen within them, or to the weſtwardes of them.

The Rockes are ſome little rockes together, The Rocks. which men may ſaile rounde aboute, but can haue no Roade under them, they lye three or foure leagues diſtant from the maine land, and are ſmaller then the Eartholmes.

A league or two to the northwardes of them lyeth the Vrouwen or Greene Iland, by ſome called the Rough Iland, and alſo the Outlyers: it is not ſo broken in it ſelfe as the Rockes, and alſo much greater, off to ſeawardes from it, lye ſome rockes: to the weſtwards of it, it is all full of rockes, ſome aboue and ſome under water, alongſt euen faſt to the land, you may ſayle aboute within the Greene Iland betwixte it and the rockes, but no man can doe it, but he muſt be verie well, acquainted there, and then alſo not without greate danger. To the ſouthwards of it you may alſo finde Roade at ſome places, but you muſt be verie well acquainted, and alſo not without daunger, by reaſon of the multitude of ſuncken rocks and ſharp grounds. The eaſt ſide of the Outlyers lye from the Rocks northeaſt and by north. The ſouth ende of Oeland is a ſharpe pointe, and lyeth from the Rockes eaſtnortheaſt and weſtſouthweſt aboute eight leagues diſtant. Thwarte of it, betwixte the mayne land and the aforeſaid ſouth pointe of Oeland it is aboute foure leagues broade, betvvixt them both goeth in the Calmer ſound. Oeland.

For to ſaile up into the Calmer ſound, then goe on from the Rockes, or from the Outlyers northnortheaſt, and then you runne in betwixt Oeland and the mayne land, ſayle in there betwixte them both, amidſt the channel, both the ſhoares are verie foule: but if you come not nearer them then in ſeuen fathome, you can take no hurte there. From the Rockes to Calmer are fifteene or ſixteene leagues: aboute halfe waies betwixt them, northweſt from Southerorden, the ſouthermoſt pointe of Oeland lyeth the towne of Chriſtianopel, lately builded there upon a little Iland by the Kings Majeſtie of Denmarck, and ſo called after his name. Thwart of it was wonte to lye upon the maine land a litle towne called Overſchare, now it is one with Chriſtianopel, thwarte of it lyeth a ledge of reckes aboute a great Engliſh myle off from the ſhoare ſoutheaſt into the ſea, come no nearer it then in ten fathome. Chriſtianopel. Overſchare.

At

At Christianopel is a hauen on the east side, from it lyeth off a riffe towards the northeast into sea; therefore he that will saile in there, must come in from the northwards for to avoide this riffe.

To the northwardes of Christianopell towardes Calmer, it is on both sides (as well on the side of the maine land, as on the side of Oelland) all full of rocks & foule grounds, but you may sound both the shoares: in the middest betwixt both in the farewaie, it is tenne & twelue fathome deepe, all soft claye grounde, to the southwards of Christianopel it is deeper, but to the northwardes towardes Calmer it is by little and little shoulder.

Berckerhaue Two leagues to the northwardes of Christianopell lyeth Berckerhauen, there men doe lade oken beames, there within it is good lying, but verie badde for to come in or out, becausе of the multitude of suncken rockes, and other foule grounds, which lye before it, about a half league off from the shoare to seawards.

Hosmes ground. Aboute a league to the northwards of Berckerhauen lyeth Hosmes ground, which is a verie bad foule ground, lying somewhat farther off from the shoar to seawards, then the other rocks which lye alongst the shoare, thereof you must take heede.

Steensoe. About a league to the southwardes, and two leagues to the northwards of Hosmes grounde lyeth a pointe called Steensoe, which is a somewhat high rough and verie foule pointe, a halfe league long, lying within, a halfe league neare to the towne, to the westwards of it runneth in a great bight, where is good lying also for many shippes, but you cannot come in there, becausе of the manie foule grounds and dangers, except it be with a verie skilfull Pilot: upon the west side, over against the pointe standeth a white house. The King of Denmarcks armie of ships laye there, in the time of the last siege of Calmer.

Castle of Calmer. When you come so farre in, that you leese the south ende of Oeland out of your sight, then you gette the Castle of Calmer in sight, sayle towardes it, but shunne the shoares, as hath been saide here before. The Castle hath four great towres, when the two eastermost of the four come one in the other, then is the Castle aboute northwest from you, then you

Grimschaer. come by the Grimschaer, this is a Rock good to be knowne, upon it standeth a mast, with a Barrell upon the toppe of it, which lyeth much nearer the west shoare then Oeland, when you get it in sight, then saile towards it. Thwarte of the Grimschaer or Tonholm lyeth a suncken rock, about a cables length off from it, and a little more to the eastwards, upon it, is no more then fiue foot water.

The Farewaie is through betwixt this suncken rock and the Grimschaer about northeast & by north, sayle close alongst by the Crimschaer, leaving it on the larboarde side, and then the foresaid suncken Rock remayneth on the starboard side of you.

Being a litle past the foresaide suncken Rock, and Grimschaer, you come then on against the west ende of a long small rock, which lyeth farre to the eastwards, towards Oeland, and lyeth almost euen with the water, at some places a little aboue water, and at some places the sea runneth alongst over it, edge then a litle up to the northwards, and runne aboute by the pointe of that rock; being past that, you shall meete on the larboard side, a lowe rock, from the which there shooteth off a little tayle to the northwards, upon it standeth a little beacon, sayle alongst by it, and being a litle past it, then shall the towne lye westsouthwest from you, let your ancker fall there in fiue or sixe fathome, there is the right road. If you come to ancker somewhat northerly in the roade, you must be carefull to take heede of a suncken rock, which lyeth not more then eleuen or twelue foote under water.

Suncke rock The markes of this suncken rock are these: when the mills upon the Mulholm are one in the other, with the mill which standeth on the north side without the towne, then you are thwarte of the foresaide suncken rock; on both sides of it, as wel to the northwards as the southwards of it, it is deep enough. It is good lying there, almost with all windes, but a north and by east vvinde is the vvorst, vvhich bloweth there in open. With shippes that goe not deeper then sixe or seuen foote, men may come to lye at the bridge before the towne.

You may also saile to the westwardes of the Grimschaer: that is, through betwixt the Grimschaer and the land, with shippes that goe not deepe, but he that shall doe it must be verie vvell acquainted there, for there it is all full of Rockes, some aboue, and some under water.

The riffe of Southerorden. From the south ende of Oeland called Southerorden, lyeth off a greate daungerous riffe a league and an halfe into sea, there it is seuen and eight fathome deepe, when the Chappell upon Southerorden is northwest a great league from you, there it is tenne and eleuen fathome deepe; you may sounde aboue this riffe in eight or nine fathom, but it is not good to come neare it, when you can doe otherwise, and can passe it.

The east Coaste of Oeland is a cleane coaste, and lyeth north and by east, & south and by west.

The south ende of Oeland sheweth thus, when it is thwart off from you.

Of the depths and grounds about these foresaid places.

IN the Farewaie to the northwardes of Bronthollom alongst to Rye, it is deepe betwixt Oelandt and Bronthollom fiue and thirtie, sixe and thirtie, and eight and thirtie fathome, but comming against Oeland, so that the south end come to be northwest & by north, northwest, and northwest & by west fiue or sixe leagues from you, there you shall finde verie uneuen grounds. Southeast fiue or sixe leagues from Southerorden, are grounds of nyne, tenne, twelue and sixteene fathome, in the nyne & ten fathome soft ground, that there remayneth nothing upon the lead, but in the fourteene or fifteene fathome, it is grosse redde and black stone sand ground, almost like gertes. Nearer againe to Oeland it is againe deeper water, and farther from the land it is also deeper, but all uneuen ground; the south ende of Oeland being about northnorthwest from you eight leagues, there it is againe sometimes twentie, fourteene and also well tenne and nyne fathome in the shouldest deepe, all stonie ground, that there remayneth nothing upon the lead, but in twentie and fiue and twentie fathome grosse redde and black stonie sand. He that saileth with a northerly wind over these foresaide shoulds, of tenne, eleuen, and twelue fathome, and is bound to Bronthollom, let him goe on westsouthwest, for to saile clear of Brontholm, if he reckon to come against it by night: the Bleecksche side he may boldly runne to by the lead in seuenteene and eighteene fathome. The point of Sandthamer runneth farre off flat, as hath been said here before, you may runne aboute by it in seuen and eight fathome.

Betwixt the Rockes and Oeland, in the farewaie to Gotland it is eight and thirtie, and nine and thirtie fathome deepe, oasie claye ground.

When Southerorden is northnorthwest somewhat northerly a league from you, there it is thirteene fathome deepe.

When the little chappel upon Southerorden is westnorthwest from you two leagues, there it is thirtie, and one and thirtie fathome deep.

When Southerorden lyeth west two greate leagues from you, there it is seuen and twentie, eight and twentie, and nine and twentie fathom deepe,

How these foresaid places doe lye asunder, one from the other.

FRom the point of Sandthamer to Somerhauen the course is northeast & by north — — — 1 league.
From Somerhauen to Ahuys north 5 leagues.
From Ahuys to Hanno e.n.e. 2 leagues.
From Hanno to the rocks the course is east and by north, somewhat easterly 11 or 12 leagues
From the rocks to the Outlyers northeast & by north — — — 1 league.
From the Outlyers to Christianopell northnortheast — — — 7 leagues.
From the Rockes to Calmer northnortheast — — — — 15 or 16 leagues.
From the Rocks to Southerorden the south end of Oeland eastnortheast 8 leagues.
From Santhamer to the rocks northeast and by east somewhat easterly 17 or 18 leagues.
From the north point of Brontholm to Ahuys north & by west somwhat northerly 10 leag.
From the north point of Brontholm to Hanno north, somewhat westerly — 12 leagues.
From the north pointe of Bronthollom to the Rocks northeast — 16 leagues.
From the north pointe of Bronthollom to Southerorden northeast and by east a little northerly — 21 leagues.
From the south end or east ende of Brontholm to the Rocks northnortheast 19 leagues.
From the east ende of Bronthollom to Southerorden northeast and by north, somewhat easterly — — 24 leagues.
From Southerorden to Reefkol s.s.e. 24 leag.
From Southerorden to Rosehead s.e. 33 leag.
From Southerorden to Quinsbrough Deepe southeast and by east, and e.s.e. 48 leagues.
From Southerorden to Dermemel east 48 leag.
From Southerorden to Sevenbergen east, somewhat northerly — 48 leagues.
From Southerorden to Derwinda e.n.e. 57 leag.
From Southerorden to the south ende of Gotland northeast, easterly 23 or 24 leagues.
From Southerorden to the Great Karell northeast and by north — 27 leagues.

CHAPT.

Duytsche mijlen 15 in een Graadt

Spaansche mijlen 17½ in een Graadt

Engelsʃ en Franʃ mijlen 20 in een Graadt

Oelandt

Noorderoorden

Groote Karel

Cleine Karel

Reefholm

Baken een maſt

Weſthoeck

Boſwijck

Weſtergaerde

Wiſburg

Houburch

GOTLANDT

Heilicholm

Narwijck

Gulgh

Sandwijck

De
Zeecuſten van
Godtlandt
met
de omleggende
Eylandekens.

Landſoort

Rakot

t' Stockholmſe Laedt

Capersteen

Godſchrſandt

Salfonreyn

Farosandt

Sliethaven

35

25

20

12

10

D T.

CHAPT. IX.

Of the Ilands Oeland and Gotland.

FRom the ſouth ende of Oelandt to the ſouth ende of Gotland the courſe is north-eaſt ſomewhat eaſterly three and twentie or four & twentie leagues, but to the Karels northeaſt & by north twentie ſeuen leagues. The courſe alongſt the farewaie, for to ſaile from the ſouth-end of Oelandt through betwixt Oelandt and Gotland, is n.n.e.

The Iland Oeland is twentie four leagues long, and a league and half broad, when men ſaile alongſt by it, they may counte eighteene towers upon it, which are all flat: the eaſt coaſt is a cleane coaſt, and lyeth north and by eaſt & ſouth and by weſt, but about 7 or 8 leagues to the ſouthwards of the north end, there ſhooteth off a little riffe, thwarte from the land a greate half league into the ſea, whichmen muſt avoid: by it goeth in a litle hauen, where indifferente ſhippes may goe in, otherwiſe Oeland hath no hauens.

From the ſouth end of Gotland runneth off a foule ſtonie riffe, a good waies into the ſea, youmay run about by it upon the leadin ſeuen, eight and nine fathome.

The Karels are two litle high Ilands, lyingon the weſt ſide of Gotland north & by weſt about ſeuen leagues from the ſouth point of Gotland, and eaſt and weſt, about a halfe league one from the other, the greateſt is called the great Karell, & lyeth a great league from the land: the ſmalleſt, the Little Karell, and lyeth aboute a halfe league from the ſhoare. When you come from the ſouthwards, the great Karel ſheweth it ſelfe in two hommocks, and the Litle Karell in one hommock, and nearer to the land. Vnder the Litle Karel is round about good roade, in eight, nine, and tenne fathome, and is rounde aboute cleane and cleare, without foule grounds. Men doe ancker betwixt it and the land, in ſixe or ſeuen fathome, there it is good lying for all windes, as well for them that are bound to the eaſtwardes, as to the weſtwards. He that ſhall be to the northwards of Gotland, and ſhall gett a contrarie wind, may alſo anker under the great Karel, but under the Litle Karell is farre the beſt roade. Under the great Karel men may ancker, on the weſt and eaſt ſide, but on the north and ſouth ſide it is foule, therefore come no nearer it by night, then in eleuen or twelue fathome. Betwixt the two Karels it is thirteene and fourteene fathome deepe.

The Great Karel.

Little Karel.

About half waies betwixte the Karels & the ſouth ende of Gotland, ſouthſoutheaſt from the Karell, lyeth the hauen Boſwyke: thwarte of it runneth off a riffe, a good waies from the ſhoar, come no nearer it then in ſeuē or eight fathom. When you are thwarte of the aforeſaid ſouth point, about a halfe league from the land, and will ſail alongſt to the northwards of Gotland, you muſt not ſail on more northerly then north-weſt, as well for to avoid that riffe of Boſwyke, as for to ſaile a weather the Karels. Boſwykes

Three or four leagues northweſt from the Karel, lyeth the Iland Reef holm, thwarte of it men doe runne into Weſtergore: you may ſaile and ancker round about it. A litle to the northwards of it lyeth the high northweſt pointe of Gotland. Reefholm.

Two leagues to the northwardes of the high pointe lyeth the towne Wiſbuy, aboute ſeuen leagues northeaſt from the Karell. Men were wonte in old tyme to lye there behinde a greate head or Cheſt.

Wiſbuye hath beene in times paſt a famous marchant towne, where was wonte to be driuen a greate trade of marchandize, but is now through the wil of God, altogether fallen down, and come to nothing. The Hance townes haue a long time there held their Staple. The old Sea lawes were made there, and alſo the old famous Read-carde. Men may ſee yet to this day many old ruinous houſes of coſtly marble, and hewen ſtones, whereby men may partly perceiue and judge, what manner of ſtatelineſſe there hath beene. Wisbuye.

From Wiſbuy the coaſt lieth forth northeaſt towards the ende of Gotland aboute 9 leagues. But from the Karell to Gotſche ſand, the courſe is northeaſt, and northeaſt and by north one & twentie leagues: that is a litle Iland, whereupon dwelleth no people, and ſtandeth full of trees: you may ſaile round aboute it, which hath a white ſtrand. From the northweſt point thereof ſhooteth off a little riffe, and likewiſe one from the ſouth point, a good waies off into ſea, towards the north ende of Gotland. On everie ſide of Gotſche ſand, you may ancker in ſixe, ſeuen, eight, nine, tenne and twelue fathome, all cleane and good ancker ground, but theſe foreſaid riffes you muſt avoide. It lyeth northnorth-eaſt ſeuen leagues diſtant from Faro, the north ende of Gotland, when you lye there under it at anckor, you cannot ſee Gotland. Gotſche ſand

The Copper ſtone lyeth from Gotſche ſand weſtnorthweſt, and northweſt & by weſt diſtant three great leagues. Copperſtone.

Vpon the ſouth ende of the eaſt ſide of Gotland ſtandeth a high towre, called Howbrough, and thereafter the ſouth ende of Gotland alſo is called Howbrough. By it goeth in a little Houburgh.

river, before which you may anker in six or seuē fathome.

Heylich holme. Fiue leagues northeast from the aforesaid south point, lyeth Heylichholme, which is a good hauen; but by reason it is but little used, it is therefore also but little known.

Narwyke. Two leagues to the eastwardes of Heylichholme lyeth the hauen of Narwyck, upon the east side of the hauen lyeth a long rock, by which you must runne in, and leaue another sharp rock on the larboard side, within the hauē you may ancker in four or fiue fathome.

Sandwyke. Two leagues to the eastwards of it lieth Sandwyck, which is a good hauen for a west, northwest, north, east, and southeast winde, and lyeth in about north, a south winde bloweth there open in: on the east point, (which is a low bare point) lyeth a Holme, which is fast to the land, upon it standeth a warder: from this point runneth off a little sand riffe, which you may sound about in fiue or sixe fathome. Within at this Holme is a bridge of masts, which lyeth off a little from the shoar. If you will ancker there in the hauen, then run in alongst by the east shoare, untill you come within the bridge, and ancker there nearest the east shoare, so that the foresaid east point doe stand southeast, or southeast & by south from you, in foure fathome, foure and an half, or fiue fathome, there is cleane clay sandground, and verie good lying for west, north & east windes.

Eastergote. A league to the eastwards of Sandwyke lyeth the Iland of Eastergore, aboute halfe waies betwixt both the ends of Gotland northeast from the southwest point, this is a bare Iland, without trees. Vnder this Iland is verie good roade for all windes, as well for them that are bound to the eastwards, as to the westwards. Comming from the westwards, or from Sandwyke alongst by the land, then is the northwest point, (which is a high bare graye pointe) hidden behinde a pointe of the maine land of Gotland, so that it seemeth a farre off to be no Iland, but comming neare it, it openeth it self, that you may see large enough through betwixt them: saile in there betwixt them both, in the mideste of the chanel, it is there cleane & clear, but somewhat uneuen of ground, to wete, eight, tenne, twelue and fourteene fathome, but you neede not to feare. If you will ancker under it for northeast or east windes, then ancker betwixt the land and the Iland, so that the aforesaid bare gray northwest point stand north, & the southermost east from you, in nine or tenne fathome. Or if you will ancker for a south, southwest, or west winde, then run further in about by that aforesaid bare graye pointe, bring it southsouthwest from you, and ancker there in seuen, eight, nine or tenne fathome, there it is clean ground of small white and black sand. A little to the northwardes of the Iland is a great Bay on Godtland, there you may also ancker in seuen and eight fathome, for westerlie windes.

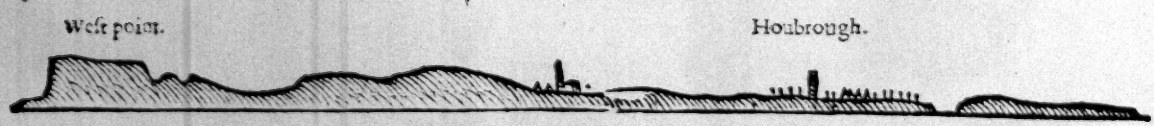
If you will saile in or oute, to the northwards of Eastergore, then come not verie neare the Iland, because there lyeth off a riffe from the east point farre into the sea, which is a greate halfe league without the land, not deeper then two fathome and a half, stonie and verie uneuen, & is to be thought, that nearer to the land it is shoulder and fowler. From the southeast side runneth off also a flat, a good waies to seawards, at some places not deeper then three, four and fiue fathome, and also verie uneuen, whereof you must take heede.

Foure leagues north and by east from Eastergore lyeth a hauen called Sliet or Sliethauen, lying in north, and north & by west behind some little Ilands, there it is good lying for easterly, westerly, and north windes. Vpon one of the northermost litle Ilands standeth a ruinous church. You must come in there alongst by the shoare from the southwards. From thence to Farosound the coast lieth north & by west two leagues.

Farosound you may runne in to, in two and three fathome water, there standeth a Church with a flatte steeple upon the land. From the north ende of Farosound lyeth off a foule dangerous riffe, a league and half or two leagues into sea, called Salfonreyn, you must take verie good heed thereof, when you wil runne aboute to the northwards of Gotland.

From Farosound to Gotsche sand the course is northnortheast about seuen leagues.

How these lands doe shew themselues at sea.

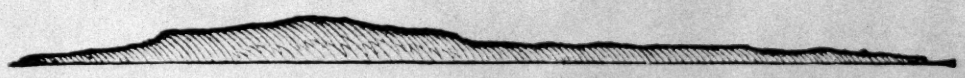


This sheweth the west pointe or northwest pointe of Gotland, when you come from the southwards.

When

When Gotſcheſand is northeaſt from you two leagues it ſheweth thus.

In this forme ſheweth the land a litle to the weſtwards of Eaſtergore, when that point is a greate league weſt from you, there it is four and twentie and fiue and twentie fathome deepe ſoft grounde.



Eaſtergore being a league weſt from you, ſheweth thus, there it is fiue and twentie fathome deepe.

Of the depths and grounds about Gotland and Oeland.

BEtwixt the ſouth endes of Oelandt and Gotland in the farewaie, it is uneuen for to ſound, ſometimes men haue two and twentie, three & twentie, and ſometimes againe eight and twentie, nine and twentie, and thirtie fathome, all black mingled ground, ſometimes ſtones ſo great as peaſe, of coullour like black earth.

When Howbrough is northnortheaſt ſeuen leagues from you, there it is 15 fathome deepe, ſtonie grounde, from thence on northeaſt two leagues, there it is twentie fathome deepe, foule ſtonie ground. Neare about theſe places, ſo far from land that you can not ſee Gotland, are bancks, where it is not deeper then twelue fathome. The like uneuen groundes are alſo thwarte of the ſouth ende of Oeland, as hath beene ſaide in the former Chapter, but betwixte them both is deeper water. If you come in the farewaie from Rye to Bronthollom, betwixt the ſouth endes of Gotland and Oeland, and muſt lye by with contrarie windes, when you are in the tenne or twelue fathome, and then ſaile towards Oeland, you ſhall get deeper vvater.

If you lye by betvvixt Oeland and Reefcoll, and that Reefcoll come to be ſouthſoutheaſt & ſouth and by eaſt from you, ſo farre without the land, that you cannot ſee it, then you ſhall get alſo the like uneuen grounde of tenne & twelue fathome, redde groſſe ſtonie ſand, and alſo blackiſh groſſe ſandie ſtone grounde; If you be neareſt to Oeland, you ſhall get, in the tenne or tvvelue fathome pittes in the tallowe, ſo that it ſeemeth, that thoſe grounds of Oeland doe run over unto, or neare Reefcoll. The like grounds and uneueneſſe doe ſeeme to lye over the ſea alſo from the ſouth ende of Gotland tovvardes Roſehead: for vvhen the ſouth ende of Gotland commeth to be aboute north from you, although it be fourteene or ſixteene leagues from you, you ſhall finde depth of ſixteen and twentie fathome ſoft grounde, like as off from Oeland, but if Gotland be more eaſterly or weſterly from you, you ſhall haue deeper water.

When you are aboute a league byweſt the ſouthweſt point of Gotland, ſo that it be ſoutheaſt, or eaſtſoutheaſt from you aboute a league, then the Karels lye about north frō you, which you may euen ſee in cleare weather, thereaboutes it is ſhoulde water a good waies off from the ſhoare. When the weſt pointe or ſteepe pointe is aboute north from you, a litle to the eaſtwards or to the weſtwards of it, there is tenne, twelue, fourteene, ſixteene and eighteene fathome deepe, a greate waies from the land: but when that pointe commeth to be northeaſt, eaſtnortheaſt, or eaſt from you, there it is aboue the fortie fathome deepe.

Betwixt the ſouthweſt point of Gotland, and the north point of Oeland it is alſo verie deepe, ſo that there you cannot caſt ground with fortie fathome.

When you are northweſt and northweſt and by north aboute two leagues from Houbrough, there you haue greate redde ſtone ſand, & black ſtones in it, ſo great as beanes.

Betvvixt Gotland and the Sweeds ſchares in the farewaie it is four and thirtie, ſixe and thirtie and eight and thirtie fathome deepe, & cloſe by Gotland fiue and twentie fathome.

When the tower of Houbrough is weſtnorthweſt from you, ſo farre as you may ſee it from the poope, there it is thirtie and one and thirtie fathome deepe, but being northnorthweſt from you

you it is ſhoulder, fiue and twentie and ſixe and twentie fathome.

Betwixt Howbrough and Eaſtergore lyeth a banck of four and twentie fathome, groſſe redde ſand, ſo farre without the land, that you cannot ſee the land out of the top. To the eaſtwards of it lyeth another banck of fourteene fathome graye and white ſand, when you are over it, you ſhall haue no ground in fortie fathome.

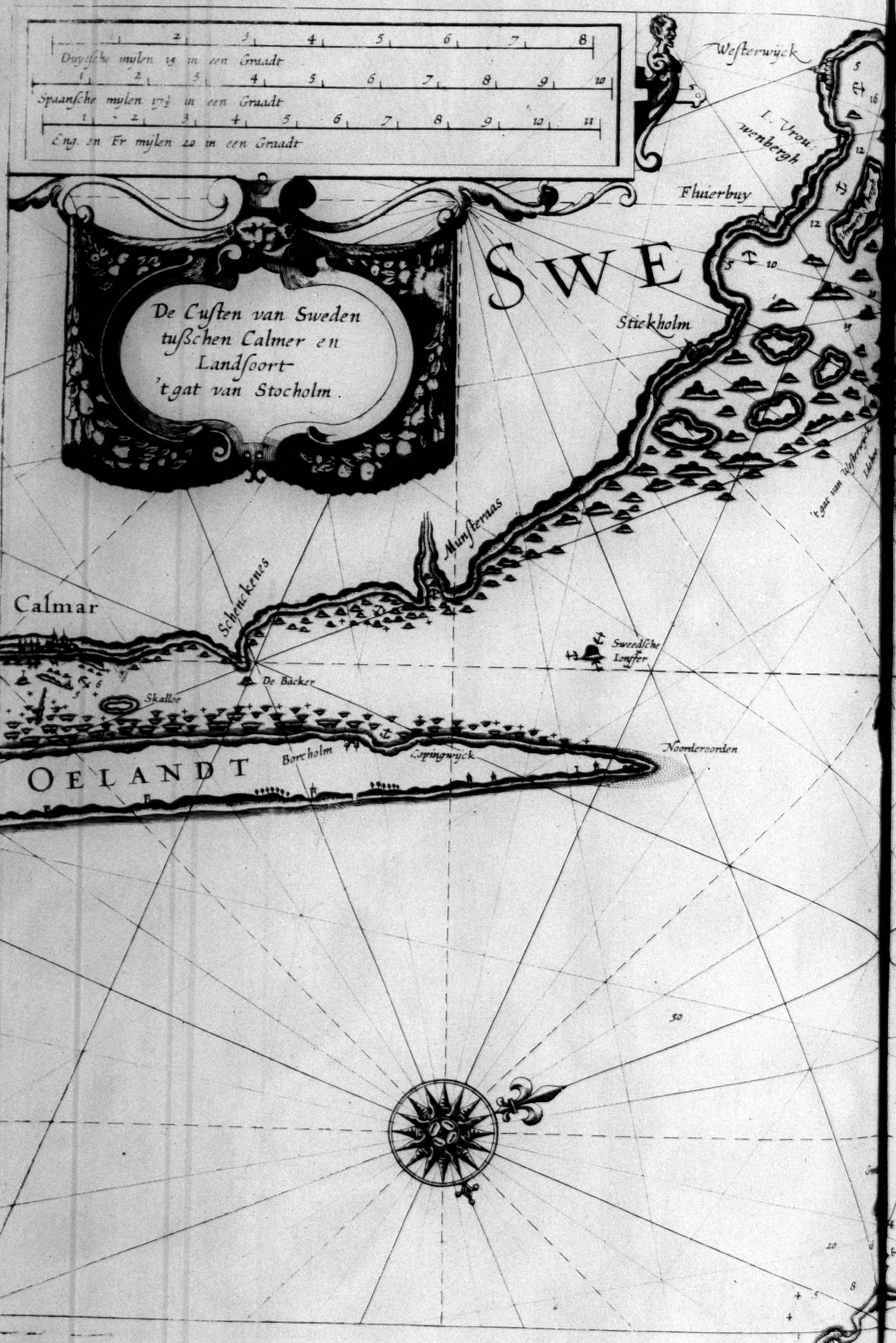
Two leagues without the land, by weſt Eaſtergore, there it is aboute one & thirtie fathom ſoft ground.

He that ſaileth from Bronthollom alongſt by Oeland towards Eaſtergore, let him not ſpare his lead, but ſound often for theſe aforeſaid bancks and groundes; thereby you may well make ſome reckoning. If you ſhould make reckoning to come by night with Gotlandt on the ſoutheaſt ſide, & haue no good ſight, then come no nearer the land (aboute the north ende or ſouth ende, and alſo by Eaſtergore) then in twentie or foure and twentie fathome, and ſo you can take no hurte by night. By day you may come neare enough to it at many places, in ſeuen, eight or tenne fathome.

How theſe places doe lye one from the other and from other lands.

FRom Houbrough to Eaſtergore northeaſt and northeaſt & by north 12 or 13 leag.
From Eaſtergore to Farofound north, and north and by eaſt — 7 leagues.
From Farofound to Gotſche ſand northnortheaſt, and north and by eaſt 6 or 7 leagues.
From Houbrough to the Karels north and by weſt — — 7 leagues.
From the Karels to Wiſbuy n.e. 7 leagues.
From the Karels to Gotſche ſand northeaſt, and northeaſt and by north — 21 leagues.
From Houbrough to the north ende of Oeland weſtnorthweſt — 12 leagues.
From the Karels to the Sweedes Ionckvrouw weſt, and weſt and by ſouth 13 leagues.
From the Karels to the channell of Stockholme north — — 21 leagues.
From the Karels to Boechſchaer northnortheaſt — — 40 leagues.
From Gotſcheſand to Boechſchaer north & by eaſt — 20 or 21 leagues.
From Gotſche ſand to the ſouth point of the Alands haff north, & north & by eaſt 33 or 34 l.
From Gotſche ſand to Wttoy northnortheaſt — — — 37 leagues.
From Gotſche ſand to Dagerorte northeaſt and by eaſt — — 27 leagues.
From Gotſcheſand to Derwinde ſoutheaſt and by eaſt — — 31 or 32 leagues.
From Eaſtergore to Dagherorte northeaſt, and northeaſt and by north — 37 leagues.
From Eaſtergore to Derwinde eaſt 27 leagues.
From Eaſtergore to Quinſbrough deepe ſouthſoutheaſt — 50 leagues.
From Eaſtergore to Roſehead ſouth 45 leagues.
From Houbrough to Hondſorte n.e. 47 leagues
From Houbrough to Lyſerorte eaſt & by north ſomewhat northerly — 40 leagues.
From Houbrough to Derwinde eaſt and by north — — 37 leagues.
From Houbrough to Dermemell eaſtſoutheaſt — — — 40 leagues.
From Houbrough to Quinſbrough deep ſoutheaſt and by ſouth — 48 leagues.
Frō Houbrough to Roſehead ſouth 34 leagues.
From the north ende of Gotland to Derwinda eaſtſoutheaſt — — 29 leagues.

CHAP.


Duytſche mylen 15 in een Graadt
Spaanſche mylen 17½ in een Graadt
Eng. en Fr mylen 20 in een Graadt
De Cuſten van Sweden tuſſchen Calmer en Landſoort- 't gat van Stocholm.
Weſterwijck
I. Vrou wenbergh
Fluierbuy
SWE
Stickholm
Munſterraas
Schenckenes
Calmar
Sweedſche Lonſter
De Bäcker
Skallor
OELANDT
Borcholm
Noorderoorden

Suyder Coppen

Schelsuyr

Stickxborgh

Brauÿck oste

Voert na Noord Coppen

D E N.

Karholm

Honds bay

Nycoppen

Groen Eÿlandt

Haßelholm

Barsondt

Voert na Jelgen

Herescharen

Swartboden

Idehancken

Hevering
ÿgat van Nycoppen

Troßa

Hertshoe

Landsoort

39

36

Cleine Karel

Reefholm

Gotlant

20

CHAP. X.

Of the coasts of Svveden betvvixt Calmer & Landsfoort, and the vvest point of the Liet of Stockholme.

Skalloe. A Halfe league to the northwards of the towne Calmer, to wit, a little to the northwards of the road, lyeth an Iland called Skalloe which you muſt leaue on the ſtarbord ſide, when you are bound from Calmer to the northwards; it is indifferent cleane upon the weſt ſide, but from the Sweeds ſide, there over againſt it, runneth off a great ſtone riffe, almoſt unto the Iland. Vpon this riffe ſtandeth commonly a ſtone-beakon: nevertheleſſe it is dangerous to ſaile through there, or over that ſhowld, for one that is not there very well acquainted: it is alſo Pilots water.

Skeggenes. Foure leagues to the northwards of the Calmer, on the Sweeds ſide, lyeth an outpoint called Schencknes, or Skeggenes, thwart of it lyeth a litle ſmall Iland called the Baker; betwixt this point and Skallo it is very uneven of depths.

The Baker.

Borckholme About two leagues more northerly over againſt it, on Oeland, lyeth Borckholm, a little to the northwardes of it lyeth Copingwyke, where men doe lade many Toombſtones, & other ſtones, with a northerly wind it is bad lying there.

Coping-wyke.

Northweſt or ſomewhat more weſterly from Borckholm about three leagues on the Sweeeds ſide, lyeth a haven in the rockes, where men doe lade Beames, to the northwards of it, n. n. w. and northweſt and by north from Borckholme lyeth Munſteraas, that is a good haven alſo for very great ſhips.

Munſteraas

Sweeds Iouſer. From Calmer to the Sweeds Iouſer the courſe is northnortheaſt nine or ten leagues, this is a round rock and very high, you may ſee it alongſt over Oeland, being a good wayes to the eaſtwards of Oeland, it is not very great, but cleane round about, ſo that you may ancker under it on every ſide in eighteene and nineteen fathom, but by reaſon that it is not broad, there cometh in (with hard winds) a rowling ſea.

From the Sweeds Iouſer to the chanell of Weſterwyke, or Silbuye, the courſe is north and by weſt eight leagues, but from Northeroorden the north end of Oeland northweſt nine leagues.

The chanell of Weſterwyke and Silbuye is called Ideſound, after a great rock lying on the north ſide of this chanell, called Ydehoe, off from it lye many rockes, ſome aboue and ſome under water, two great leagues to ſeawards, which are called the Idebanks. He that will ſaile from the north end of Oeland towards the Barſound, and by bare windes, doth come a little to the weſtwards, without the right fare-way, muſt be very carefull, and take good heed that he get not in amongſt them. Ideſound. Id. banks.

For to know the chanell of Weſterwyke, you ſhal ſee a high bare rock, bring that north weſt from you, and ſaile ſo right in, and then you ſhall fall with the land right before it, and then alſo you ſhall eſpye another bare rocke, whereupon ſtandeth a Fiſhers beakon, and alſo another to the ſouthwards of it, with a maſt, ſaile in betwixt the two rockes, the chanell lyeth in northweſt and northweſt and by north: when you are come within them you nay ſaile alongſt through the rocks where you deſire to be, to Silbuye, Stixholm, Fluerbuy, Vrowenbergh, VVeſterwyke, up to the northwards to Schelſuyr and other places more, there it is all cleane ground, and 12, 15, 18, and 20 fathom deep.

If you be bound to Silbuye, then ſaile up to the northwards or eaſtwards untill you come before the towne, and ancker there in the middeſt betweene the rockes in 7, 8 and 9 fathom. Silbuy.

If you be bound to Fleurbuy, or Vrowenbergh, then ſaile in weſt, and weſt & by north throngh the rocks till you come againſt the maine land; there you may ancker before Flevrbuy, or ſaile up n.w. betwixt the Iland of Vrowenbergh and the maine land, and ancker there in twelue fathom: alſo you may runne through that way untill you come to VVeſterwyke. VVeſterwyke lieth from Silbuy through within the rocks weſt, and weſt and by north, there it is in the fareway 15 and 16 fathom deep. Fleurbuy: Weſterwyke.

From Silbuy to Schelſuyr it is northnorthweſt 7 leagues, all alongſt through within the rockes. Schelſuyr is a good haven, there lyeth a rocke in the havens mouth, about which you may run in on both ſides, and ancker before the towne. Schelſuyr.

To the eaſtwards of Schelſuyr lyeth the Hondtsbay and the Green Iland, there it is alſo good anckeriug. You may run from Silbuy alongſt by it untill you come in the Sound of Southercoppen and Northcoppen. Hondtsbay. Green Iland.

From the chanell of VVeſterwyke to the Barſound, the coaſt lieth alongſt by the rocks north and by eaſt eight leagues. But from

the north end of Oeland to the Barſound the courſe is north and by weſt 16 leagues, go not more weſterly, that you get not into the ſuncken rocks and fowle grounds of the Ide-banks.

The north end of Oeland runneth ſomewhat farre off flat. If you run out cloſe by Oeland, and ſaile on north and by weſt, then you run alongſt farre enough without the Ide-banks, and ſo ſhall fall with the land about a halfe league to the ſouthwards of Barſound againſt a deale of low out-rocks. It ſeemeth a farre of (by reaſon of the multitude of rocks and litle Ilands) to be all firm land, but comming neare it, it is all broken. You ſhall ſee there alſo an Iland by which there ſeemeth to be a chanell, but you muſt be further to the northwards, run alongſt by the coaſt in 7 fathom, ſo long vntill that you ſee out a head high out-rocks, theſe ſhal be the Heerſcharen which are very fowle, and lye off from the north point of the chanel, a good wayes eaſt-ſoutheaſt into ſea, all which you muſt leaue on the ſtarboard ſide, and run alongſt by them unto the chanell. When as you come out of the ſea, you muſt take very good heed that you fall not with the land to the northwards of the chanell, that you doe not get into the foreſaid Heerſcharen. When you come before the chanell, you ſhall ſee two Sounds or goings in, the ſouthermoſt ſeemeth to be the broadeſt and faireſt, but the northermoſt is farre the beſt, and lyeth in northnorthweſt. On the north ſide of the chanell lyeth a great rock with a beackon vpon it, and ſomewhat more to the northwards ſheweth a round hil, by all which marks this chanell is very good to be knowne. When you are right before the norther chanell, and doe ſee open into it, then ſaile in northnorthweſt; being come in about a ſhot of a calt peece, you ſhall ſee on the larboard ſide two little low Ilands, anker within them in 17 or 18 fathom, there you muſt hire a Pylot to bring you up, either to Southercoppen or Northercoppen, where you deſire to be, it is Pylots water. It is from thence to Southercoppen about ten leagues, but to Northercoppen 18 leagues. In the comming in of the Sound is good ankerground in 10 fathom. Within in the Sound it is broad and wide, and all over good ankering in 18 and 20 fathom.

Barſound.

Heerſcharen.

About an Engliſh mile within the Sound, you leaue (in ſailing up) the Talderſound on the larboard ſide, there is no more then 6 or 7 foot water, from thence you edge up north, & alſo northeaſt a half league, then again weſt and by ſouth about two leagues, afterwards weſtnorthweſt a league unto Karholm, which is a Gentlemans houſe with a mill. From Karholm to Stickbrough it is further weſt about two leagues, that is a caſtle upon a litle Iland, you muſt goe about to the ſouthwards of it through a bridge.

Talder-ſound.

Karhom.

From Stickbrough ſaile up alongſt the Sound, and leaue moſt of all the rocks (which you ſee) on the larboard ſide, except one or two a litle aboue Stickbrough, leaue them on the ſtarboard ſide. About two leagues paſt Stickborgh ſtandeth a gentlemans houſe called Mem, there is the place where men doe lade, a halfe league from Southercopping.

Stickborg.

For to ſaile from without the Northercopping, you muſt run in by the Swartboden up weſtwards unto Schenes and Braburch and alongſt unto the Brawyke the ſound of North copping, or els you muſt come in at the Barſound through within the rocks into the Brawyke unto Northercoping, but it is not to be done without a Pilot for them that are not there very well acquainted, for it is Pilots water,

Brawyke.

From the north end of Oeland to the chanell Nycopping by the Hevering, the courſe is due north about 21 leagues, but if you run cloſe alongſt by the end of Oeland, you ſhall fall with the land a little to the weſtwards of the Hevering. The Hevering is a great reddiſh bare rock, wherupon ſtand 3 or 4 Fiſhers beacons, heretofore there was wont to ſtand upon it a barrell upon a maſt, which men might ſee farre off at ſea, but it is taken off in the laſt warres between the Kings of Sweden and Denmark, now there ſtandeth nothing upon it but ſome Warders.

Hevering.

Two great leagues to the weſtwards of the Hevering, to wit, weſtſouthweſt from it, lye the foreſaid rockes called the Swartboden, which are great rocks, and are ſometimes miſtaken for the Hevering, you may ſaile in alſo by theſe Swartboden, and run through within Oxelen and the other rocks, and come by the point of the Hommelwyke into the right ſound of Nycoppen.

Swartboden.

When you come before the chanell of the Heveringh, you can at firſt hardly ſee a channell, or any opening, but bring the great rock the Hevering northweſt from you, and ſaile ſo right in, and runne in cloſe alongſt to the northwards of it. In the ſailing in you ſhall ſee two chanels, the northermoſt is within full of dangers, ſo that you cannot goe through there. The right chanell by the Heveringh is ſo narrow, that you can hardly turne to and againe there.

From the Hevering you muſt ſaile in firſt north-

From the Hevering you muſt ſaile in firſt northweſt a league and halfe, or two leagues, unto a great rock, leaue it on the ſtarboard ſide, and ſaile about by it, and goe in alongſt northweſt and by north. A little within the foreſaid great rock, thwart of the point of the Hommelwyke Hommelwyke, you ſhall find alſo a great rock on the ſtarboard ſide, you may run about to the weſtwards of it, until you come within the other rocks and little Ilands, and anker there in three fathom ſoft ground: but if you will ancker there, then you muſt ſhun ſomewhat the weſt end of the great Holm, becauſe of a ſuncken rock that lyeth even without the point of the rock. From that foreſaid roade unto Haſſell-holm the courſe is yet in alongſt northweſt and by north; but with ſhippes of great draught you muſt anker before the chanell of Haſſell-holme. From the Heveringh to the Haſſell-holme it is in all about 3 or 4 leagues.

Haſſelholm From Haſſell-holm alongſt upwards thorough the ſtone-reach, it is not deeper then nine foote, you muſt alſo (if you will ſaile up there) firſt ſet the rockes, or ſuncken rockes with beakons with your boat, or elſe you ſhould ſometimes ſaile upon ſome of the rockes in 7 foot depth. The narroweſt of the Stonereache. Stone-reach is thwart of an Iland which you muſt leaue on the ſtarboard ſide, off from which lyeth a ſunken rock in the narrow, you muſt goe cloſe alongſt by the ſuncken rock, for to the weſtwards of it is very ſhowld water. Being paſt this ſtony ground, you ſhal get oaſie ground, where it is not deeper then ſixe foot; being come over that by the town Nycopping Nycopping, it is again eight foote deep, but ſtony ground. The ſhippes lye without the towne, thwart of the beakons over againſt the caſtle, which lyeth on the weſt ſide of the river.

From Haſſell-holm to the town Nycopping it is about a league firſt up north and by weſt, & afterwards weſt. For one that is unacquainted, it is not well to ſaile up, it is alſo Pilots water, ſo ſoone as you come within the chanell, you can get a Pilot to bring you where you deſire to be.

From Nycopping you may ſaile alongſt thorough the rocks to the northwards of Haſſelholm unto Troſa and Telghen.

Landſoort Landeſoort (which is the weſt point of the Liet of Stockholm) lyeth from the Hevering eaſtnortheaſt diſtant 7 or 8 leagues.

About halfe wayes betwixt both lyeth a great high rock very good to be knowne, a Hartſoe. good wayes without the land alone called Hartſoe, and a little league to the weſtwards of Landſoort lye alſo ſome fowle out-rockes called the Heyrhamer. When as you ſail from the Hevering on eaſtnortheaſt, then you run Heyrhamer. alongſt a little without the Hartſoe, leaving it on the larboard ſide. With that courſe, you cannot alſo ſaile too neere the Heyrhamer, & then you leaue it lying alſo on the larboard ſide towards the land.

The land to the weſtwards of Landſoort lies weſt, or weſt & by ſouth, with divers great rockes and havens where you may ſaile into. About a league to the weſtwards of it lyeth a haven within a low rock in betwixt two other low rockes, there you muſt make you faſt with kables on both ſhoares, and with an ancker in the Sound. Before the havens mouth lyeth high a round rock, which ſhutteth the havens mouth.

A little to the weſtwards of Hartſoe goeth in a haven or Deep, where you may run thorough with Barkes within Elſnap unto Stockholme.

A little to the weſtwards of that Deep lyeth the Sound of Telghen lying in northweſt, almoſt unto the great Lack de Meller, upon the end of that Sound lyeth Telghen, but at the mouth of the Sound lyeth the litle towne Troſa.

About an Engliſh mile ſouthweſt from the point of Landſoort, lye two rockes even with the water, and within theſe rockes cloſe by Landſoort lyeth alſo a ſuncken rock. He that commeth from the ſouthwards, being bound to Stockholm, and falleth with the land to the weſtwards of the point of Landſoort, muſt take heed of them; you may ſaile within theſe two rockes (lying even with the water) to wit, betwixt them and the foreſaid ſuncken rock, and alſo (as the Pilots ſay) you may ſaile through within the ſuncken rock, that is, betwixt the ſuncken rock and the maine land.

Landſoort and the north point of Oeland lie ſouthſouthweſt and north northeaſt diſtant three and twenty or foure & twenty leagues. If you ſaile on northnortheaſt from the north end of Oeland, you ſhall fall with the land right with Landſoort, or a little to the eaſtwards of it. It is better to fall with the land ſomewhat to the weſtwards of it, then to the eaſtwards of it, to the weſtwards the land is better to be knowne then the rockes to the eaſtwards of it. Therefore when as you will ſaile from the north end of Oeland to Stockholm, eſpecially in dark wether, go on ſomewhat more northerly then northnortheaſt, or north and by eaſt, and then you ſhall runne in ſight of the foreſaid rock Hartſoe, which is good to be knowne.

How theſe places doe lye one from the other.

From Calmer to Sceggenes northnorth-eaſt 4 leagues
From Scheggenes to the Sweedes Ioufer northnortheaſt 7 leagues
From the Swedes Ioufer to Ideſound the chanell of Weſterwyke, or Silbuy north and by weſt, ſomewhat weſterly 8 leagues
From the Swedes Ioufer to Northeroorden the north end of Oeland eaſt and by north — — 3 or 4 leagues
From Northeroorden to the chanell of Weſterwyke northweſt 9 leagues
From Northeroorden to the Barſound, north and by weſt 16 leagues
From Northeroorden to the Hevering, or the chanel of Nyccpping north 21 leagues
From Northeroorden to Hartſoe north and by eaſt 23 leagues
From Northeroorden to Landſoort northnortheaſt 23 or 24 leagues
From Hevering to Landſoort eaſtnortheaſt 7 or 8 leagues

CHAP. XI.

How men ſhall ſaile up the Liet of Stockholme.

THE Liet of Stockholme goeth in northeaſt by the point of Landſort. About a league eaſt from the point ly ſome black rocks, ſome aboue and ſome under water, called the Karwaſen. Betwixt them & the point, about once ſo neare the Karwaſen, as the point, lyeth an other black rock, not great, called the yong Karwaſen, betwixt that rock and the point of Landſoort, men doe ſaile into the chanell of Stockholm. Cloſe to the point lyeth alſo a litle Iland which you muſt leaue on the larboard ſide, and run alongſt to the eaſtwards of it, a league northeaſt from the point lyeth the Wigſtone, lying ſoutheaſt or eaſtſoutheaſt thwart off from the ſhore. This is ſomewhat a long rock with three hommocks, the two weſtermoſt are the greateſt, and ſhew like a ſaddle, the eaſtermoſt hommock is the ſmalleſt, upon it ſtandeth a litle walled cape, you muſt ſaile alongſt to the eaſtwards of it, and leaue the rock on the larboard ſide. You may well ſaile alſo about to the weſtwards of this Wigſtone, it is cleane round about, but on the weſt ſide it is narroweſt, betwixt it and the land lyeth alſo a rock, with a little rock off from it, which you muſt avoid.

Wigſtone.

A league northeaſt from the Wigſtone lyeth the Middle ſtone, which is a great high rock with a great clift or ſadle, with another great rock a little to the weſtwards of it: you cannot ſaile through betwixt them, they are faſt one to the other with rocks. In ſailing up men leaue this Middleſtone on the ſtarboard ſide, and run about to the weſtwards of it.

Middleſtone.

From by eaſt the Wigſtone to the Middleſtone, to wit, alongſt to the weſtwards of it, the courſe is northnortheaſt. About a great Engliſh mile eaſt from the Wigſtone, and north from the Karwaſen lyeth another rock called the Gombergſtone, & to the eaſtwards of it another called Schaeropen. When you ſaile from the Wigſtone to the Middleſtone, you leaue them both on the ſtarboard ſide.

Gombergſtone.

Thwart of the Middleſtone, on the Weſtland lyeth the haven of Ramskloof, there you may anker within the rocks. The Middleſtone lyeth about a half league ſ. w. from the eaſt point of the Liet, to wit, from the eaſt point of the main land, or the Swedes ſchares; betwixt thé both goeth in a chanel called the Danske chanell. For to ſaile in there, you muſt avoid the forſaid eaſt point a good wayes off (wherupon ſtandeth a mill) & run in by the Middleſtone, for from that point runneth off a great ledge of rocks a good wayes to ſeawards, towards the Middleſtone. From by weſt the Middleſtone to Elſnap the courſe is n.e. three leagues. When you are a litle paſt the Middleſtone, you come in betwixt the two lands, & a litle within the eaſt point you ſhall meet with a rock in the fare-way callad the Red Cow. You may ſaile about it on both ſides, but men leaue it commonly on the ſtarbord ſide, within that rock, that is on the north ſide you may anker. Elſnap is a haven behinde two litle Ilands, where the Kings ſhips of warr do commonly lye to tarry for a winde, when they are bound to ſea, there it is very good lying, when with contrary windes you can neither get up nor down, you can come in & out there both from the northwards & from the ſouthwards very conveniently. Coming from the ſouthwards you can ſee over the ſouthermoſt litle Iland, the maſts of the ſhips that lye behind it. For to ſaile in there behind it, run in about by the ſouth point of the Iland Elſnap behind it, and then you leaue a litle black rocke on the ſouth ſide of the havens mouth, lying on the larbord ſide. Betwixt the two litle Ilands of Elſnap runnes alſo a channel through where you may go through with Huyes & ſmal ſhips. From thwart of Elſnap the courſe is inwards n.n.e. about 2 leagues to the Red-holm, that is a great red round rock grown full of trees,

Ramskloof.

Danske-chanell.

Red-cow.

Elſnap.

Redholm.

to

Gomberg. stone.

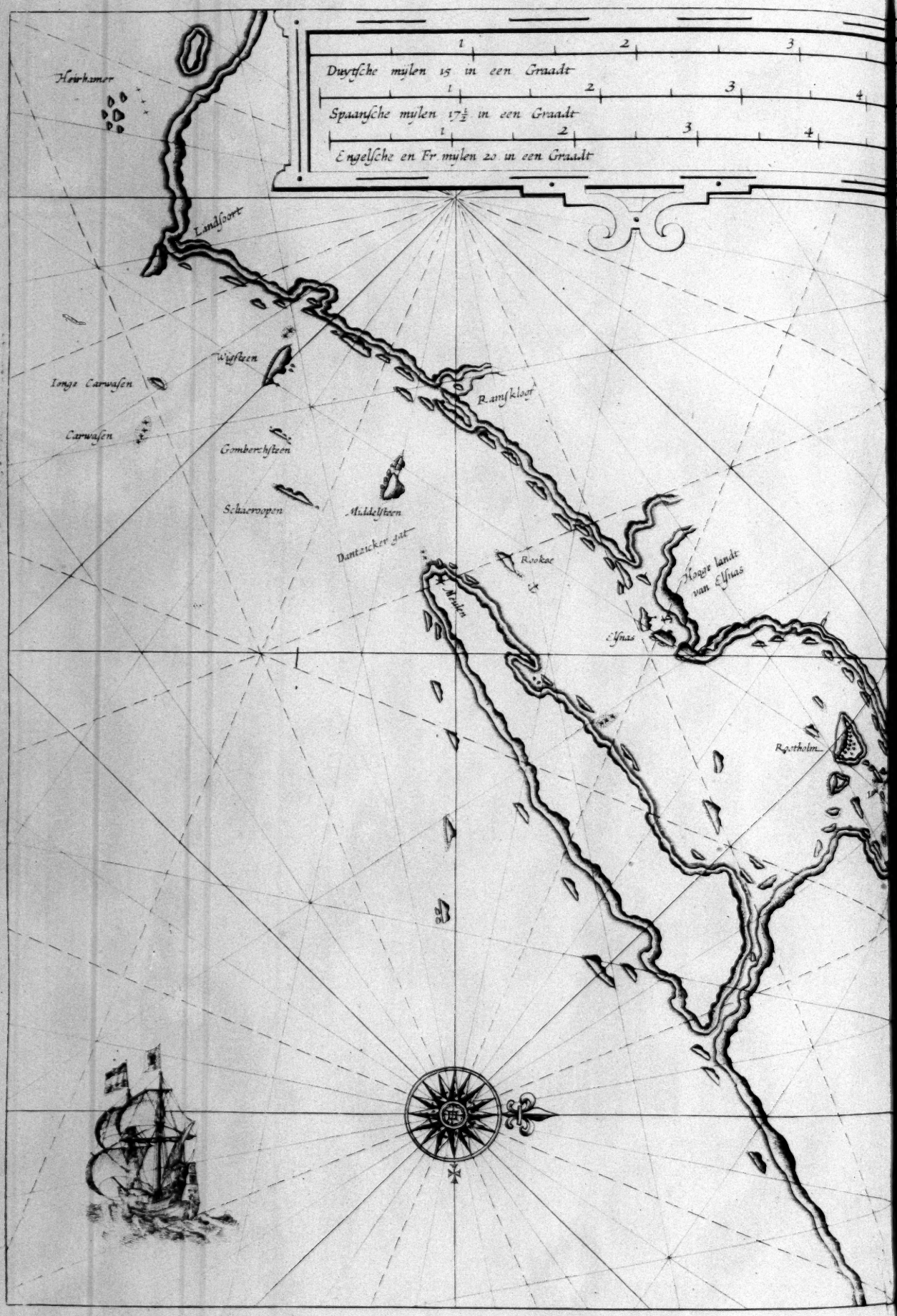
Ramskloof.

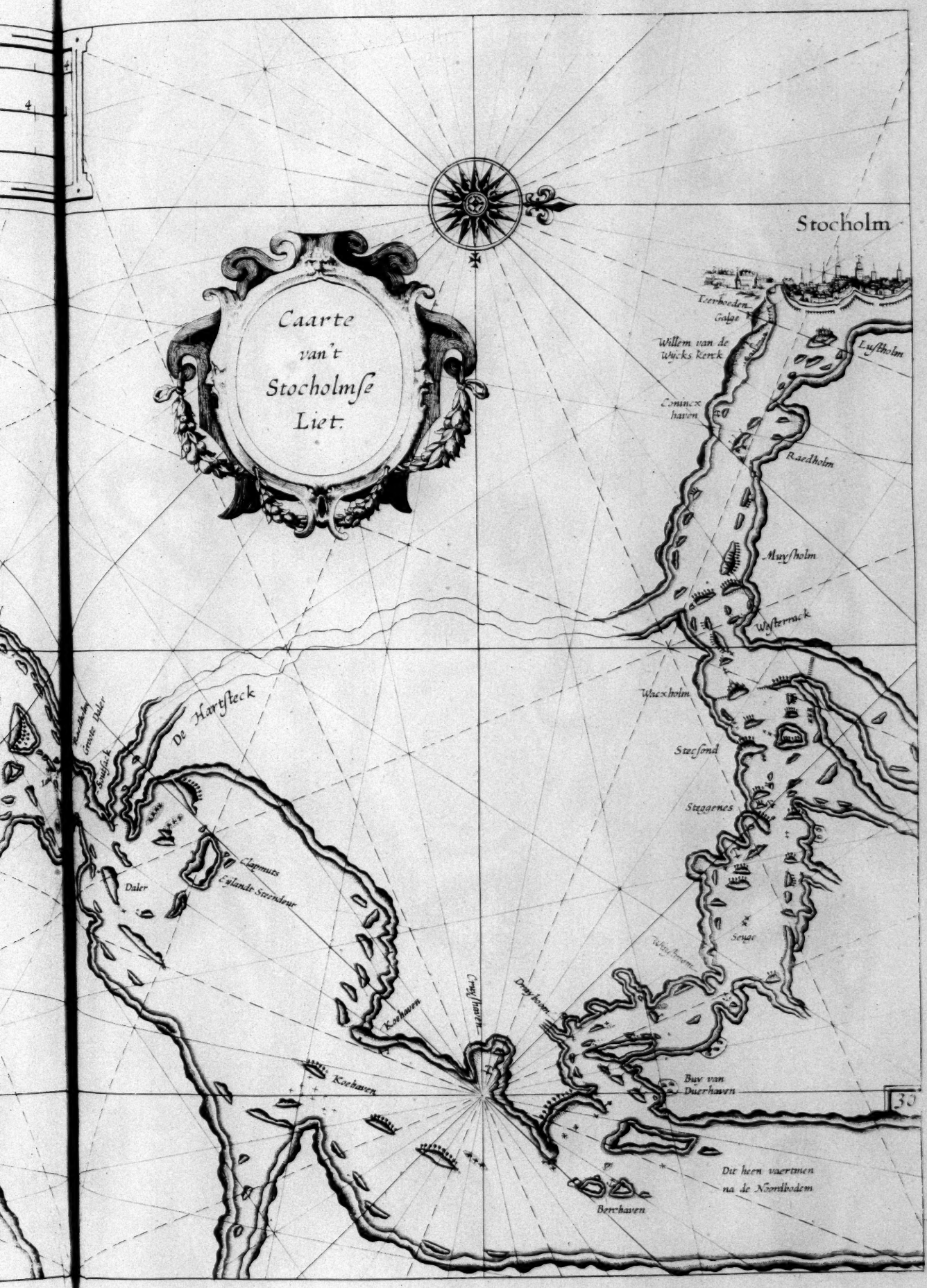
Danske-chanell.

Red-cow.

Elfnap.

Redholm.


1 2 3
Duytsche mylen 15 in een Graadt
1 2 3 4
Spaansche mylen 17½ in een Graadt
1 2 3 4
Engelsche en Fr mylen 20 in een Graadt
Heirhamer
Landsoort
Wijsteen
Inige Carwasen
Carwasen
Gomberchsteen
Schaeroopen
Middelsteen
Dantzicker dat
Ruamskloof
Rookae
Ronge landt van Elsnas
Elsnas
Rotholm


Caarte
van't
Stocholmse
Liet.
Stocholm
Teerhoeden
Galge
Willem van de
Wycks Kerck
Lustholm
Coninex
haven
Raedtholm
Muysholm
Westerrack
Waexholm
Steesond
Staggernes
Seuge
De Hartsteck
Clapmuts
Eylandt Steendrur
Daler
Koehaven
Koehaven
Buy van
Duerhaven
Dit heen vaertuen
na de Noordbodem
Berchaven
30

to the eaſtwardes of it lyeth another ſmaller bare rock, the fareway is there in through betwixt them, and about a musket ſhot broad. In this narrow it is all over good anker-ground. From the north end of the Redholm lieth off a great row of rocks unto the eaſt ſhore of the Liet, where you muſt ſaile through. When as you ſaile through betwixt the Redholm and the foreſaid bare rock to the eaſtwards of it, go then on yet about an Engliſh mile further n.n.e. untill you come thwart of the fourth chanell to tell off from the Red-holm which lyeth through the foreſaid row of rockes to the northwards of the Redholm, that is called S. Iohns chanell, it lyeth through about n.n.w. or ſomewhat more northerly, it is a ſhort Inlet, run through there. Being through S. Iohns chanel, go again n.n.e. about an Engliſh mile to the Raedholm, which is a long rock upon it ſtand 3 barrels upon maſts, this you muſt leaue on the larbord ſide, & run alongſt to the eaſtwards of it. From the north point of that Redholme runneth of a little riffe, or ſhowld, which you muſt avoid. From the Red holm unto the great Daler the courſe is n. w. and by north, that is a haven on the weſt ſide of the Liet, there lieth a churchyard within on the land, where the ſlain Poles people in the laſt Poliſh wars lye buried. Thwart of that Churchyard is a ſandbay, there is good anker-ground, like as is all over in that foreſaid haven. At the north point of the haven the great Daler lyeth a ſuncken rock cloſe by the land, called the Saltſack, upon which is no more then 9 foot water. From the great Daler the courſe is alongſt n. e. a half league unto the litle Daler, which is a high ſteep rock, the higheſt that you find amongſt al the rocks in the Liet, run alongſt to the weſtwards of it, and leaue it on the ſtarbord ſide. Over againſt it on the weſt ſide lyeth another rock, which is called alſo the Daler, to the weſtwards of it. to wit betwixt that rock and the main land, is alſo an opening, where you may ſail through, A litle within that foreſaid rock on the weſt-land goeth in the Hardſtick which is a Sound that lyeth in firſt weſt, and weſt and by north, a good waies in, and then n.w. & cometh into the Liet to the northwards of Waxholm, by Kingſhaven. The Kings Maieſty hath cauſed to ſink ſome ſhips in the mouth of the Sound, ſo that men cannot goe through there with great ſhips, but onely with litle barks. From the little Daler the courſe is n.n.w, about a half league to Steendeur, a great Iland, which you muſt leaue on the ſtarboard ſide, and run cloſe along by it, & ſo you ſhal leaue a round rock to the ſouthwards over againſt it on the larbord ſide, and ſaile through betwixt them:

S. Iohns chanell.

Raedholm.

Great Daler.

Saltſack.

Litle Daler.

Hardſtick.

Steendeur.

this chanell lyeth through n. w. At the weſt end of the great Iland Steendeur lyeth a little black rock, you muſt run about by it again to the eaſtwards.

From Steendeur to Kow-haven the courſe is e n e. two leagues, that is a rock lying in the broad Sound, leaue it on the ſtarbord ſide, & ſail to the weſtwards of it alongſt by the weſt land unto Berckhaven. Betwixt both about halfe wayes lyeth a haven called the Croſſe-haven, there it is good lying for weſt & north-weſt wind. Kowhaven.

Berkhaven lyeth from Cow-haven n.e. & by north diſtant about 2 leagues: this is a haven betwixt two Ilands where is good ankering for all wind, as wel for them which come from Stockholm, and deſire to ſaile to the Northbodem, as alſo for them that will ſaile off towards Landſoort, there is (like as at moſt places betwixt the rocks & Ilands) good clay ground. When you come from Kow-haven, and are bound to Stockholm, you muſt leaue theſe two Ilands of Berckhaven on the ſtarboard ſide, and run in about betwixt them and the point of the maine land. From the narrow betwixt Berckhaven and the foreſaid point to Duerhaven, the courſe is n.w. about a half league. On the ſ.w. ſide of that fareway thwart of the point over againſt Duerhaven, ly two ſunken rocks, on each ſide of the point one, the one on the n.w. ſide, and the other on the ſ.e. ſide, commonly there ſtandeth upon each of them a litle tree for a beakon. Barkhaven. Duerhaven.

From the point of Duerhaven unto the Drayboam the courſe is ſ.w. and by weſt ſomwhat weſterly about a half league, it is called alſo the Duerhaven, off from the point within the Ilands untill you come before the buye, alongſt there, and alſo within the Ilands, it is good lying every where. Draybome.

Tke litle Ilands which lye in the chanell of the Dray-bome, you muſt leaue them on the ſtarboard ſide of you.

From the Draybome to the Windſtream the courſe is firſt north, & north & by weſt untill about half wayes, there you ſhall find a litle Iland with a litle tree, leaue that on the larbord ſide, and goe from thence in n.n.w. to the Windſtream. In the Windſtream is good ankering by the ſhore, except in the north end of the ſtream, there is no anker ground. From the Draybome to the Windſtream it is about a league diſtance. Windſtream.

From the Windſtreame to the Seugh the courſe is w.n.w. a half league, that is a chindle or ſtone-banck even with the water, runne alongſt to the northwards of it, and leaue it on the larboard. The Seugh.

Scheggen. From the Seugh to Scheggen the courſe is weſt and by north a league, run alongſt there by the ſouth ſhore. When you come againſt Scheggen, you ſhall ſee upon the point of the ſouth ſhore a litle round tree over againſt that little tree ſomewhat more northerly then in the middle of the channell, lyeth a ſuncken rock, for to avoid it you muſt run neareſt the ſouth ſhore. The reach of Scheggen lyeth through weſt, and weſt and by ſouth about an Engliſh mile, it is narow, but hath every where ancker ground.

Steckholm From Scheggen the courſe is w. ſ. w. an Engliſh mile to Steckſound, or weſt to Kingsdeep, the little Ilands on the ſtarboard ſide as you ſaile to Steckſound, are cleane round about, ſo that you may goe on all ſides about by them. Comming cloſe to Steckſound you ſhal find a ſunken rock a litle by ſouth the fareway. The Steckſound lieth through ſ. ſ. w. it is a ſhort In-let about a cables length long.

Waxholm From Steckſound unto Waxholm it is ſ. w. weſterly about an Engliſh mile. Upon Waxholm ſtandeth the Kings caſtle, there all the ſhips are viſited whether they go up or down, the chanell there by it, is paled too ſo neare, that they can ſhut it with a boam.

Weſter. reach. From Waxholm to the VVeſter reach the conrſe is w. ſ. w. and through the VVeſterreach ſouthweſt. From thence alongſt weſt

Eeldam. to Eeldam, that is a very narrow chanel a litle

Mouſeholm. more then a ſhips length broad.

From Eeldam the courſe is weſt to Mouſeholm, which is about a league from VVaxholm, men leaue the high rough Mouſe-holm on the ſtarboard ſide, and run alongſt by it to

Kings haven the ſouthwards.

From the Mouſe-holm to Kings-haven it is a league weſt, and weſt & by north all alongſt by the ſouthland.

From Kings-haven unto the town Stockholme the courſe is northweſt, and northweſt Stockholm and by weſt alſo a league diſtance along by the ſhoare. VVhen you come before the towne, you may ancker where you pleaſe.

He that falleth to leewards, or by any other accident cannot come by Landſoort into the Liet of Stocholm, he may ſail in more to the northwards through divers chanels. Amongſt others there is one where men may ſaile into, & come by the great Daler into the Liet: there goeth another in by the Swedes ſand, through it men come by Berckhaven into the Liet. The knowledge of this chanell is a very high rock, with another that is not ſo high, thereby to the ſouthwards of it, betwixt theſe two rockes goeth in this chanell, it is very narrow in the comming in, not aboue two ſhippes lengths broad. So ſoon as you come in within theſe rocks, you may edge up about by the loweſt, which is the ſouthermoſt, and ancker under it in very good ancker-ground.

From that road in the Swedes ſands the Sound goeth up firſt about northweſt and by north, and northweſt 5 leagues unto Bercker-haven into the Liet of Stockholm. This is a very good chanell as wel for to ſaile in as out, but becauſe it is not eaſie to know, comming in out of the ſea, it is ſeldom uſed.

To the ſouthwards or the weſtwards of theſe two foreſaid rocks, at the comming in of this chanell, it is all low land. If you come from the ſouthwards, and run alongſt by that low land, ſo long untill that you begin to get the high land, you ſhall alſo run in ſight of theſe two foreſaid hõmocks. About a league to ſeawards from them, lye 3 or 4 ſmall rocks; for to ſaile in there you muſt leaue them on the ſtarbord ſide, and in ſailing out on the larbord ſide.

To the Book binder.

Place the Cardes thus.

Numb. 19, & 20,		before fol.	65.
21,	—	—	67.
22,	—	—	71.
23,	—	—	73.
24,	—	—	79.
25,	—	—	81.
26,	—	—	83.
27	—	—	89.
28	—	—	93
29	—		97
30	—		101

The ſecond parts

FOVRTH BOOK

of the

SEA-MIRROVR

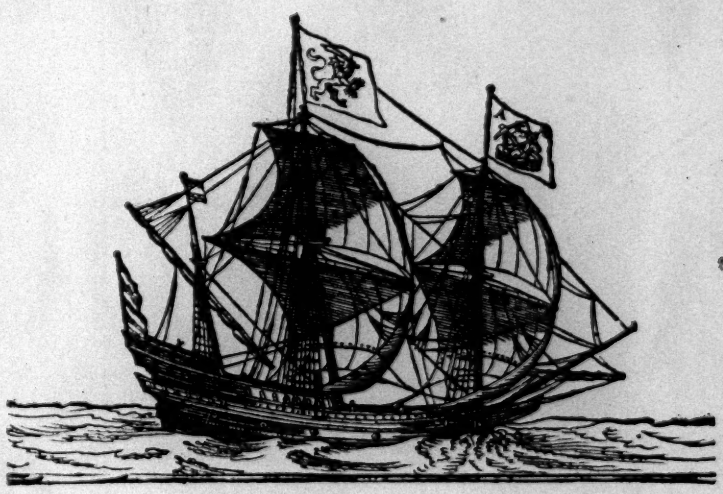
of the Eaſterne and Northerne

NAVIGATION.

Containing

THE DESCRIPTION OF THE

Seacoaſtes of the Eaſt ſide of England and Scotland.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.

De Cuſten van
ENGELANDT,
Nederlandt, Iutlant en Noor
wegen gelegen aende
NOORDZEE
Door Willem Janſſen Blaeu

ENGELANDT

NEDERLANDT

Holla ndt

Antwerpen

Londen

Doggers
Sandt

Duytſche mylen 15. in een graadt.
Spaenſche mylen 17½. in een graadt.
Engelſche en Franſche mylen 20. in een graadt.

Orcades

Fuls

Ferril

S. Magni foort

Hitland

Hamnavger haven

Yeagbp

Idlo

Olbo

NOORWE GEN

Cum privilegio Ord. Fœd. Prov.
ad decennium.

Duytsche mylen 15 in een graedt

Spaensche mylen 17 ½ in een graedt

Engelsche en Fran: mylen 20 in een graedt

Texelse Flu.

Zeemck

Blacteni

Bornham

De Noor

Quine borch

Schapeie

Schoubaken

Wittakers baken

De Spreta

De Swaluw

Wijnstaple

De Spaenjaerds

Vlaschers diep

De Mudts

Rokolver

Margat

S. Peter

T'Voorlandt

Kinters knock

Goeyngh

Rochester
Grauesent
Tilborch
Cluft
Schapen
Groenhey
Ooritts Rack
Groemonts
Wolwits
Wolwits dogh
Greij
Clemens Rack
Perfluet
Graueſent
Barking
Blackwal
Rootkhit
Londõ
Blackeyl
Lyhaven
Colchester
Bricklezy
S. Oſies
Hernuts
De Nees
De Koert
Beſels Clif
Beſel
Orfordneſs
Aelburgh
Westroot
Wijtingſandt
Aelburgher knock
Galper
Conuex

Paſcaarte
vertheonende de
mont vande Teemſe
de Riuier van Londen
met alle gronden
diepten en ondiepten
daer voor gelegen

THE FOVRTH BOOK
of the
EASTERNE AND NORTHERN NAVIGATION.

Conteyning the Deſcription of the Coaſts of the Eaſt ſide of England and Scotland.

CHAP. I.

For to ſaile up into the River of London.

BY two wayes men may ſaile into the river of London, from the ſouthwards alongſt by the north Forland, and from the Northwards alongſt by the Naes. If you will ſaile in there from the ſouthwards, then you muſt firſt ſhun the North Forland, it is there ſhowld a good wayes from the ſhore, bring the north Forland alſo not more ſoutherly from you then ſouthweſt, that you do not run on againſt the North-grounds, which lye farre to ſeawards. Comming by the land, run alongſt by it, but come not ſo neere it, that you leeſe ſight of the ſpyre of the ſteeple of Margat behind the land, for then you ſhould come too neere it; but if you keepe ſo far from the ſhore, that you can ſee the foreſaid ſteeple aboue the high land, or keep it even in your ſight, then you cannot take hurt of the ſouth grounds. Coming thwart of Margat, then you are paſt the foreſaid ſhowlds or ſouth grounds. Run then boldly towards the ſhore, & within two cables lengths alongſt by it, for to avoid the north grounds, which lye farre to the ſouthwards towards the land. Saile on ſo weſt all alongſt by the ſhore, untill that the Roculvers (which are two ſteeples upon one church) come one in the other, and then you ſhall run in ſight of the firſt buye upon the Laſts, which lieth upon the foreſaid markes of the Roculvers, being by it you can alſo ſee the other buye which lyeth like as the firſt alſo on the north ſide, and over againſt it on the ſouth ſide ſtandeth a beakon, there you muſt ſaile through betwixt them both, leaving the buye on the ſtarboard ſide, and the beakon over-againſt it on the larboard ſide. From thence you may with litle ſhippes, or ſhippes of little draught, but not with ſhips of great draught, at high water run over the Swallow on weſt-northweſt towards Sheppy, for it is there ſhowld water, with ſhips of great draught you muſt runne through the Fiſhers deep towards Blacke-taile. You may alſo runne from Margat with ſmall ſhippes alongſt by the ſhoare upon the lead at high water even unto Sheppy, but in ſailing alongſt there you muſt caſt your tydes well, for the flood falleth very ſtrong into the Swallow, and the ebbe to the contrary very ſtrong out.

Roculvers.

When you come by Sheppy, runne within two cables lengths alongſt by it, for to avoid the taile of the Spaniard, untill that you be paſt Quinsbrough, edge then off from the ſouth ſhore for to avoid the Noere, which is is a ſand that ſhooteth off from the ſouth point of the river a good wayes to the eaſtwards, upon the outermoſt end, wherof ſtandeth alwayes a beakon, whereby you may know it. Run alongſt to the northwards of it, leaving it on the larboard ſide, and alongſt in the middle of the chanel into the ſea-reach for to avoid the grounds which lye off from the north ſhore, goe in ſo alongſt towardes Graveſend.

Sheppy.

The Spagnierd.

The Noze.

To ſaile with ſhippes of great draughts alongſt by the north Forland up into the Thames, you muſt (when you are paſt the buyes upon the Laſts) ſaile through the Fiſhers deep, toward Black-taile, which lyeth from the ſecond buye upon the Laſts, unto the firſt buye in the fiſhers deepe northweſt and northweſt and by weſt, which lyeth upon the north ſide of the ſand, which men doe call the Spaniard, theſe two buyes lye a great wayes one from the other.

Fishers-deep.

Sailing from the buye upon the Laſts it is a great

great wayes all ſhowld water, ſo that you muſt ruune over there with high water, but comming neare the buye upon the Spaniard, it is by little and little deeper water. Hee that will ſaile over heere, muſt reckon his tides well, the flood falleth there alongſt towards the ſouthweſt almoſt thwart over the deepe, and the ebbe to the contrary.

The ſecond buye in the Fiſhers Deepe you muſt leaue on the ſtarbord ſide, and the buye upon the Spanierd on the larbord ſide: being paſt that, you come againſt the Blacke-tayle, to the ſouthwards of the Shoe-beakon into the right deepe. The eaſt point of Sheppy ſhall then lye about ſouth from you. From the Shoe-beakon the courſe is ſouthweſt to the point of Black-taile, there runneth off a hooke which men might (at unawares) ſail within (comming from the northwards) in fiue or ſixe fathom, but if you keep from the ſhoare in ſeven fathom, you cannot ſaile within it. From Blacke-taile to the beakon upon the Noere, the courſe is weſtſouthweſt, leaue it it on the larboard ſide, as before is ſaid, and runne in alongſt the river, in the middle of the chanell betwixt both lands unto Grauеſend.

For to ſaile into the river of London from the northwards.

For to ſaile into the river of London comming from the northwards, you muſt come neere the coaſt to the northwards of Orfordnes, which is to the northwards of all the ſands, there lye Albrough, Dunwich, Walderſwike, Sowle and Covehit, all betwixt Orfordnes and Leyſtaff. Covehit is a ſharp ſteeple like as alſo Leyſtaffe, but Sowle and Walderſwyke, Albrough and Orfordnes are all flat ſteeples. Sowle & Dunwich lye both upon the high land, betwixt them both is a valley, therein you may ſee Walderſwyke when yo are thwart of it. Dunwich is the beſt to be knowne of all theſe foreſaid places: it hath two flat ſteeples, and on both ſides ſome trees. To the ſouthwards of it lieth Albrough which is alſo very good to be knowne, it hath one high flat ſteeple with three mills, the two ſtand to the northwards, and the third to the ſouthwards of Albroughwhen you are thwart of it, but ſailing to the ſouthwards, they come at laſt all three to the ſouthwards of it. The land without Albrough, and to the ſouthwards of it is very low flat and chindely land.

Sowle.

Dunwich.

Albrough.

Betwixt Albrough and Dunwich about half wayes betwixt them, lyeth a Wood which is at both ends high, and in the middeſt low with a ſaddle; this you ſhall commonly ſee firſt when you fall with the land thereabouts, and is the beſt to be knowne for to know the coaſt by; the land without it, and to the ſouthwards is very low flat chindely land. About two leagues to the ſouthwards of Albrough lyeth Orfordnes, betwixt them both ſtand alſo two woods of trees, which ſhew themſelues a farre off like caſtles or towers. Orfordnes is a flat ſteeple with a thick or broad caſtle, which hath alſo a thick flat ſteeple, almoſt of faſhion like the ſteeple of Rarop, open aboue with holes in it like Bell-holes. Orfordnes.

Before Dunwich you may ancker, there is good lying in eight or nine fathom ſomewhat ſoft ground. Before Aelbrough is the beſt road of all the coaſt thereabouts in 6 and 7 fathom.

Albrough Knock.

Eaſt from Aelbrough about two leagues lyeth Aelbrough Knock, this is a ſand which at low water is not deeper then ſeven or eight foote: you may ſound round about it in fiue fathom, but it is not good to come nearer it. With ſea windes you may diſcerne it plainly by the breaking of the ſea upon it; but with landerly or weſterly windes, and faire weather, the ſea breaketh not upon it, hee that runneth thereby to the northwardes with an eb, ſhal ſee it cõmonly ripple very much vpon it, like as upon moſt of the Engliſh banks, and not indeed the upon bankes, but againſt them, for upon the ſhowldeſt or middeſt of the bankes is alwayes the ſmootheſt water, like as you finde every where.

Markes of Albrough Knock.

When as Aelbrough is weſt from you, and the two ſteeples of Orfordnes are one in the other, there you ſhall finde Albrough knock. Theſe are ſure marks of that ſand.

Whiting ſand.

The Whiting, or VVhiting ſand, is ſomewhat a long ſmall ſand lying before Orfordnes, and the chindely land to the ſouthwards of Aelbrough, and lieth alongſt the reach, but the ſouth end lyeth further from land then the north end, there is at low water not aboue ſix or ſeven foot water upon it. Coming from the northwards, men ſaile commonly to the weſtwards of it, that is through betwixt the land and VVhiting-ſand, towards the Naze. Men may alſo ſaile alongſt to the eaſtwards of it, through betwixt VVhiting-ſand and the eaſtermoſt point of the Court, or Courtſand, which ſome doe call the Rib. The Co

The north end of the VVhiting lyeth alongſt cloſe to the ſhore, and lyeth from the ſteeples of Orfordnes ſoutheaſt and by ſouth, it is ſo exceeding ſteepe and needle too, that you ſhall haue the one caſt nine, the next caſt fiue fathom, and then you are no more but a ſhips length from it, before you can heaue the lead again you ſhould be upon it. VVhen as you ſit with the foreſhip againſt it, it is at the ſtearne fiue or ſixe fathom deepe.

Alongſt

Alongſt the Inner ſide it is alſo everie where ſo ſteepe, that you cannot ſounde it, but on the outer ſide you may runne alongſt by it in fiue fathome upon the lead, untill you come within the ſands.

When as you come from the northwardes & wil ſaile through within the Whyting, you muſt runne cloſe alongſt by the ſhoare, and ſouthweſt about by the point of the Chindle to the ſouthwardes of Aelbrough, untill you come within the north pointe of the Whytinge, when the ſteeples of Orfordnes come to be northweſt and by north from you, then you are right thwarte of the north pointe of the Whyting, being within it goe againe more ſoutherly, to weete, ſouthweſt and by ſouth towardes Balſy cliffe.

If you ſhould fall to the ſouthwards of Whyting, or els comming from the ſouthwards will ſaile in there to the northwardes, then bring the ſteeples of Orfordnes weſtnorthweſt or northweſt and by weſt, but for all not more northerly then northweſt from you, and ſaile ſo right in untill you come by the Chindle ſtrand, then run in alongſt by it, as is before ſaide, and then you ſhal run far enough alongſt to the northwardes of the Whyting.

For to runne into the eaſtwards of the Whyting.

If you will ſaile in to the eaſtwardes or the ſouthwardes of the Whyting, then bring the ſteeples of Orfordnes northnorthweſt, or northweſt and by north, or northweſt from you, and ſaile in ſo right with them, untill that the wood of trees, that ſtandeth upon the nexte pointe to the ſouthwardes of Balſy cliffe, come to Balſy cliffe, which ſhall then ſtand aboute weſtſouthweſt from you, keepe that aforeſaide woode to the ſouth ſide of the cliffe, and ſaile in bouldly right with it, and then you ſhall runne right in the farewaie, in betwixte the Whiting, and the tayle of Courteſand: but if you bring the foreſaide trees more then a handſpikes length without the cliffe, you ſhall not faile to runne on againſt the pointe of the Courte. That aforeſaide wood of trees is verie good to be knowen, becauſe there aboutes ſtand no other trees.

Or bring the ſteeple of Balſy weſtſouthweſt from you, and ſaile in ſo right with it, untill you come by Whiting ſand, in fiue or ſixe fathome, and leade it in ſo by it upon the leade, untill that you come by Balſy, or that you gett deeper water.

When you come neare Balſy, whether you be come in from the northwards, or the ſouthwardes of Whytingſand, you muſt keepe ſomewhat off from the ſhoare, becauſe of a little riffe or ſmall tayle, that ſhooteth off from the ſhoare, thwarte of Balſy cliffe, which you muſt avoide ſomewhat, with ſhippes of greate draughts, there remayneth at lowe water upon it no more then two fathome, you may commonly perceiue it well by the rippeling of the tyde.

You may alſo ſaile in to the ſouthwardes of the Ribbe (that is, the tayle of the Courte or Courte ſand) thus: Bring the ſteeple of Balſy northnorthweſt, or a litle more northerly from you, and ſaile in ſo right with it, and ſo you ſhal runne in to the northwardes, or through the Courte, at a channell of eight fathome depth, the eaſt ſide of this channell is ſteepe, come no nearer it then eight fathome, but by the weſt ſide you may runne in aboute by the Court, upon the lead, untill you come within the ſands.

Balſy hath a high flatte ſteeple, and lyeth ſomewhat within the land behind the clif, when as you come from the northwards, you may ſee Balſy to the northwardes or the weſtwardes of the cliffe, but you ſaile it altogether behinde the cliffe, ſo that at laſt it cometh out againe to the ſouthwardes of it. Balſy.

If you will ſaile to Harwich being paſt Balſy, then bring Balſy to that ſteeppoint to the ſouthwardes of Balſy, where the trees ſtande upon, keepe theſe markes ſo ſtanding, and runne ſo alongſt by the ſhoare, untill that you be over the pointe of the Chindle, the markes thereof are two high trees within the land, when they are aboute northnorthweſt from you, then they come one in the other with the ſteeple of Harwich, and then you are right over the pointe of the Chindle, and then you ſhall gett deeper water, to wete foure and fiue fathome, or ſomewhat more againſt the higheſt water. Runne in then aboute by the pointe, the channel lieth in right north, but inthe midſt of the hauens mouth lies a ſuncken rockie and ſtonie ground, which you muſt avoide, you may ſaile in aboute it on both ſides, by the one ſhoare or the other, but alongſt by the eaſt ſhoare it is beſt, being within it, you cannot ſaile amiſſe, to take hurte, if you do not ſaile bluntly againſt the ſhoare: there you may ancker al over, where you pleaſe, before the towne, in fiue, ſixe, and ſeuen fathome. You may well alſo goe further into the bight, there it is clean everie where. The farewaie betwixt Orfordnes or Whitingſand & the Naes lieth moſt ſouthweſt and by ſouth, & is 6, 7, & 8 fathome deepe, in turning to windwards, you may run to the ſhoare in 5 and 4 fathome, but cloſe to the ſands it is deeper, to wete, 8, 9, and 10 fathome, the nearer the ſands the deeper water.

But for to ſaile from Bolſy to the Naze, you muſt marke the ſteeple of Balſy, when it commeth within a capſtone barres length neere to the ſouth ende of the cliffe, then keep them ſo ſtanding, ſo long untill that the houſe upon the Naze come over the two fields, which lye on againſt the High land, or come over a black head upon the ſea ſide, ſaile then

right in with them, until that the ſteeple of Harwich come to be northnorthweſt from you in the little valleye of a redde cliffe, leaue then the firſt markes, keepe the ſteeple of Harwich in that little valleye, and goe on ſouthſoutheaſt, untill that the thirde pointe of the Naze come without the two other pointes, ſo you ſhall run through betwixt the Naze and the Courte, there remayneth at lowe water no more then eight, tenne, and at ſome places twelue foote water, therefore it is not good to runne through here, unleſſe that it be a quarter floude, or with a ſhippe of greate draught at halfe floude, there it is verie uneuen of grounde, rockie and ſtonie. The pointe of the Naze is verie ſtonie, foule, and uneuen, the nearer the ſhoare thwart of that pointe the ſhoulder, but the nearer the Sands the deeper.

When that the third point of the Naze cometh without the two other points, or the other land, and that it doth againe beginne to deepe off, to wete, four or fiue fathome, then go ſouthweſt ſomewhat ſoutherly, or ſouthweſt and by ſouth, unto the buye upon Longſand. Thwart of the Naze is Longſand verie ſteepe, ſo that it cannot be well ſounded with the lead by them that are not there verie well acquainted, but ſomwhat more to the ſouthwards, you may run alongſt by it in four fathome, and three fathome and a halfe, untill that you get the buye upon Longſand in ſight of you. The north ſhoare to the ſouthwards of the Naze is alſo flat, you may runne alongſt by it alſo upon the lead, without any daunger.

Longſand.

Buyes upon Longſand or the Spits.

The buye upon Longſand lyeth in two fathome and an half at half floud, you muſt leaue it on the larboard ſide, and the Buye upon the Spits, on the ſtarboard ſide, which lyeth a little ſhoulder, they lye aboute ſouth and by eaſt and north and by weſt, a musket ſhott one from the other. The courſe betwixte the two buyes is ſouthſoutheaſt & northnorthweſt, but you muſt reckon wel your tide, whether you run through there with a floude or with an ebbe. Upon the Spits, betwixt the two buyes is at halfe floude at leaſt three fathome and an halfe, or almoſt four fathome, in the right channell, a little to the ſouthwardes of the buye upon the Spitts ſtande two maſtes aboue water, of a loſt ſhippe, which are good markes. Being over the Spitts, the courſe to Whitakers beacon is ſouthſouthweſt.

The Spits.

Whitakers beacon.

Aboute halfe waies betwixte them ſtand alſo two maſtes more on the ſame weſt ſide, & over againſt theſe maſtes lieth a middle plate, whereupon lyeth a buye on the weſt ſide: the fareway is alongſt to the weſtwardes of this Middleplate, through betwixte that foreſaid buye and the maſtes.

Middleplate.

To the northwards of that foreſaide Middleplate, goeth out a channell by the ſouth ſide of Longſand, which you may ſaile out and in at, called the Kings-deepe. If you come from Whitakers beacon, paſt the Middleplate, ſo far that you get ſight of the buyes of Longſand or Spits, goe then bouldly eaſtnortheaſt and northeaſt & by eaſt into ſea, or upon the lead alongſt by Longſand, but if you ſhould runne into ſea, to the ſouthwardes of the Middleplate, you ſhould with an eaſtnortheaſt waie fall within the hooke of the Mouſe. This Kings deepe is a readie channell, and is uſed almoſt by all ſhippes for to runne out at.

Kings deepe.

For to runne in at this channel out of the ſea, then bring the pointe of the Naze northweſt from you, and ſaile in ſo with it, untill that you come neare Goemfliet or Longſand in fiue fathome, goe in then alongſt by it aboute weſtſouthweſt and ſouthweſt and by weſt, and keepe the ſounding of Longſand, and ſo you ſhall not fayle to runne in ſight of the buye upon the Spittes and the foreſaid maſts to the ſouthwards of it.

For to ſaile into the Kings deepe.

From Whitakers beacon to the Shoebeacon the courſe is ſouthſouthweſt ſomewhat weſterly, comming thwarte of the Shoebeacon, then lyeth the eaſt point of Seppie about ſouth from you. From the Shoebeacon the courſe is alongſt ſouthweſt to the point of Blacktayle, there runneth off a Hooke, which men might ſaile within comming from the northwards: but if you keepe from the ſhoare in ſeuen fathom, you cannot take hurte of it, but in fiue fathome you runne within it. The like Hooke is alſo a little to the ſouthwardes of the Shoebeacon, which you might unawares ſaile within, coming from the ſouthwardes.

Shoebeacon.

Blacktayle.

From Blacktayle to the beacon upon the Nore, the courſe is weſtſouthweſt. The Nore is a ſand, lying from the ſouth pointe of the maine land of the river, farre to the eaſtwardes therefore leaue the beacon on the larboard ſide, and goe on weſt alongſt, amidſt the channell into the river, betwixte both the lands, as here before hath beene ſaide in the Deſcription of the Fiſhers deepe.

The Nore.

Of the Depths and Shouldes aboute theſe places, & in what Depths men may ſee the land.

Fiue or ſixe leagues north and by eaſt, and northnortheaſt from the north Forland of from Margat lyeth a banck called Kentiſh Knock, upon it is three fathome water. Being by it you may euen ſee the land from belowe. Fiue leagues northeaſt from this banck it is twentie fathome deepe.

Northeaſt and by north from the north Forland nine or tenne leagues, and aboute eaſt from the

the Naze eight leagues into the sea, lieth a bank called the Galloper, of fiue, sixe and seuen fathome depth.

The Westrocks is a stonie ground, lying betweene the Court and Longsand, whereupon is no more then two fathom water at half floud.

Without that sand of Harwich fiue leagues from the Naze it is twentie, and two and twentie fathome deepe, being there you may see the land.

Thwarte of Orfordnes you may see the land from below, in two and twentie fathome.

What moone maketh high water at these places.

AT the North Forland a north and south moone maketh high water.

Within the Thames a south and by east moone.

Before the Thames, at Harwich and Orfordnes a southsoutheast moone.

Of the falling and course of the streames about these foresaid places.

FRom the north Forland the floude falleth to the Roco Ivers, and over the Braeckes w. s. w. and west and by south.

Without aboute Goodwin towards Kentish Knock the floud falleth north and by west and n. n. w. there commeth the floud also against it from the northwardes, and meete one another by the Galloper, with verie greate rippeling and noise, (wherof this banck is also called the Galloper) and falleth to the westwardes into the sands and channels, and also to the eastwardes towardes Flanders.

Betvvixt the North Forland and Orfordnes the streame falleth without the sands south and by east, and southsoutheast.

When you are to the northwards of the Galloper, then you can reckon no ebbe, then that vvhich runneth alongst England to the northwardes, the streames fall there all alongst the coastes. To the southwardes of the Galloper the ebbe goeth to the contrarie, to the southwardes, and the floud to the northwardes.

How these lands doe lye one from the other, and from other lands.

FRom the North Forland to the north end of Goodwin the course is south & by east one greate league.

From the North Forland to Kentish Knock northeast & by east, and n. n. e. 4 or 5 leagues.
From thence to Orfordnes north 12 leagues.
From the North Forlande to the Gallopper northeast and by north — 9 leagues.
From the Gallopper to Orfordnes northnorthvvest — — 9 or 10 leagues.
From the North Forland to the Wielings the course is east, somewhat northerly aboute — — — 27 leagues.
From the North Forland to the Mase the course is eastnortheast, or somewhat more easterlie aboute — 33 leagues.
From the North Forland to the Tessell or Marsdiep northeast — 45 leagues.
From the Naze or Harwich to the Mase east — — — — 29 leagues.
From Orfordnes to Tessel e. n. e. 39 leagues.

Heigths of these places.

THe North Forland lieth in 51 degr. 25 m.
Orfordnes lieth in 52 deg. 12 mi.

CHAPT. II.

Of the Coaſts of England betvveene Orfordnes and Cromer.

FRom Albrough alongſt by Dunwich to Couchit the coaſte lieth north & by eaſt ſomevvhat eaſterly, & ſouth and by vveſt or ſomevvhat weſterlie fiue leagues: but from Couchit to Leyſtaf north & ſouth two leagues. Albrough, Dunvvich and the ſands lying thereaboutes, are deſcribed in the former chapter.

Sowle. Betvvixte Dunvvich and Covehit lyeth the hauen of Sovvle, vvhich is a litle ſhoulde river, a litle vvithin it divideth it ſelf into three parts, upon the north ermoſt arme lieth Sowle, upon Dunwich. the middlemoſt Walderſvvike, and upon the ſouthermoſt Dunwich.

Couchit hath a high ſharpe ſteeple, thwart of it lieth a banck not far from land, which falleth almoſt drye at lovv vvater, but at halt floud you may ſaile through betvvixt it & the land in 3 fathome, upon the outer ſide it is verie ſteepe, ſo that you cannot come nearer it then nine or ten fathome. When the ſteeple of Eaſton is w. n. w. from you, then you are to the ſouthwards of the banck, and when the ſteeple of Couchit is ſ. w. and by w. from you, then you are to the northwardes of it.

Leiſtaf. Two leagues to the northwardes of Couchit lieth Leyſtaf, & two leagues more to the northwards of it lieth Yarmouth. The ſteeple of Leiſtaff is a high ſharp ſteeple, & ſtandeth a greate musket ſhot within the land from the houſes, ſo that in ſailing alongſt you may bring the ſteeple on both ſides of the houſes. Off from Leiſtaf begin the bancks or Holmes of Yarmouth, & lye alongſt to the northwards paſt Yarmouth, untill thwarte of Winterton, there go divers channels through them, which men may ſail through, upon divers marks, for thoſe that are ther acquainted; you may ſaile through within theſe bancks, off from Leiſtaf until paſt Winterton.

For to come within the bancks of Yarmouth. If you wil run through frō before Leiſtaf within theſe banks, thē looke out for the firebeacons which ſtand by Leiſtaf, which ar two litle white houſes, the one ſtandeth beneath upon the chindle on the ſea ſide, & the Innermoſt upon a litle hommock, ſomewhat farther within the land. When you come frō the ſouthwards, they ſhew themſelues to the northwards of the towne, but come at laſt thwart of it. In the night there is alwaies fired upon thē, for to ſail in there alſo by night. Bring theſe foreſaid firebeacons n.w. & by north, or ſomewhat more northerlye from you, & ſaile in ſo right with them either by night or by daie, the church of Leiſtaf commeth then to the ſouthwardes of the Towne over a Countrie houſe by the water ſide, when you come againſt the channel, there is at low water no more then 3 fathom depth, keep theſe foreſaid firebeacons one in the other, or bring the Innermoſt rather a litle to the northwards of the outermoſt, for to avoide a litle plate, which lieth on the ſouth ſide of the Deep, but the chanel is indifferent wide, run on until you come againſt the ſtrand in two fathom and a half or two fathom, ſo near as you will or can, & go then up northwards alongſt by the ſhoare, you ſhall then (being failed a litle to the northwards) meet with a flat, whereupon remaineth at low water leſſe then two fathome depth, with laden ſhips, you muſt ancker before that flat, & ſtay for high water, it floweth there aboute eight foot up and downe, ſo ſoone as you are over the flat it wil be 5, 6, & 7 fathom deep, edge then to the ſhoare, & ſail toward it, & then you come before the Brewehouſe, there is the roade, where you may anker in 4, 5, or 6 fathom, frō thence northward toward Yarmouth alongſt the ſhore is al over good ankring & good groūd.

Hauen of Yarmouth. About an Engliſh mile or ſomewhat more to the ſouthwards of the towne Yarmouth, is the hauen of Yarmouth, it hath two wooden heads, where you muſt ſaile in betwixte them both againſt the higheſt water, when the ſtrongeſt of the floud is ſpent, at halfe floud it is dangerous, becauſe of the ſtrong tide, which ſhould lightly carrie you into the bight, againſt the ſhoare, (againſt your will) it is alſo beſt to run in alongſt by the ſoutherhead, there it is deepeſt. At Yarmouth in the roade men doe commonly ancker Rode before Yarmouth. to the northwards of the hauen, right thwart of the towne, in 5, 6, 7, or 8 fathome, the nearer you ancker to the ſandes the deeper water you ſhall haue, but all good ſand and ſoft ground.

If you wil ſaile into the Roade of Yarmouth through the Holmes, then bring the ſharpe litle ſteeple, that ſtandeth to the northwards of Yarmouth vvithin the land, over the broade caſtle, or bring the mil to the north ſide of the towne: keepe theſe marks ſo ſtanding, & go in ſo w.n.w. you ſhal find in this chanel not leſſe vvater then 8 or 9 fathome at half floud, this chanel is called S. Nicholas chanel. S. Nicholas chanel: on the north ſide it is deepeſt being come in, the roade is right before the towne in fiue ande ſix fathome.

Thwarte or over againſt the hauen of Yarmouth goeth alſo a chanel through the Holmes, for to ſaile in through there comming from the ſouthwardes, then bringe Southon over the north ſide of the hauen, ; the greate tree betvvixt Northon & that flat little houſe or caſtle, ſaile in right with them, & keep theſe marks ſo ſtanding, until that you be within the Holms,

vvithin

Haven of Yarmouth

Rode bri Yarmouth

S. Nich chanel.

1 2 3

Duytsche mylen 15 in een graedt

1 2 3 4

Spaensche mylen 17 ½ in een graedt

1 2 3 4

Eng: en Fra: mylen 20 in een graedt

Aelburgh

Dunnuits

Walderwyck

Souuts

Kaffy

Leuestaf

Aelburger knock

De Zeecuſten van Engelandt tuſſchen Aelborgh en Crammer

Crammer

Haesborgh

Admiraels huys

Winterdamm

De Hoens

Jarmuyen

Holmen voor Jarmuyen

Winterdamner Sandt

t Nieuwe Sandt

33

vvithin them lieth a plate on the ſtarboard ſide, a little to the northwards of the hauen called the Middleground, you may ſaile aboute it on both ſides, on the inner ſide in 5 fathom, but towards the Holmes, or aboute to the eaſtvvards of it in eight and nine fathome.

From Yarmouth to Winterton the coaſt lieth north & by vveſt, & n.n.w. tvvo leagues.

If you vvil ſail from Yarmouth forth through vvithin the banks to the northvvards, ſail along by the land, & keep the ſounding of the ſhore in 5, 6, or 7 fathome, until that you haue the tvvo firebeacons (vvhich ſtand a little to the northwards of Caſtor) one in the other, ſail then right vvith them, either by day or by night, (in the night there is fired upon them) you ſhall ſo run over a flat, through betvvixt tvvo buies, vvhich lie each of them upon a tail of a ſand, ſail bouldlie in, vvith the foreſaide firebeacons, untill you come againe neare the ſhoare, in 5 or 6 fathome, being come by the ſhoare, run then again along by it, and keepe the ſounding thereof as before, al alongſt until you come before Winterton.

Rif of Winterton, or Winterton Neſſe.

Thvvart of Winterton runeth off a dangerous rif, vvhich is dangerous to ſaile about by night, if men doe come too near it, vvhich is upon the ende ſo ſteep, that (in 3 fathom or 2 fathom and a half) you ſhal not be a ſhips length off from it. But vvhen as you (coming frō the fouthvvards) keepe your ſelf in 6 or 7 fathome, then you cannot ſaile too neare to it. To the ſouthvvardes of that riff upon the land, ſtandeth a firetovvre, vvhich is verie good to be knovvne, vvith a firebeacon, & alſo a little vvhite houſe, vvhen theſe come one in the other, then you are thvvarte of the point of the riffe.

To the northvvards of this rif upon the land ſtand tvvo vvhite firebeacons, vvhereupon there is fired by night, for to avoid this rif. When as you come thvvart of the point, then are theſe alſo one in the other, ſo that theſe doe ſerue for thvvart marks, & the other to the ſouthwards of them for longſt marks, for thoſe that vvil ſaile aboute it frō the ſouthvvards. Coming from the northwards alongſt the ſhoare in 5 or 6 fathom, until you come by the firebeacōs upō the north ſide, you muſt keep ſomevvhat off frō the ſhore, before they come one in the other, or els you ſhould run on againſt the rif. When they are one in the other then they ſtand ſ.vv. & by vv. from you, & vvhē as the high firebeacon to the ſouthvvards of Winterton cometh to be ſ. vv. ſomevvhat more vveſterly from you, then you are thwart of the point of the rif: you may not alſo runne about far without that riff, for then you ſhould lightlie be foule of the groundes to the eaſtwards of it, eſpecially when you come from the northvvards, for there it is not verie vvide betwixt them both.

From Winterton to Haeſbrough point the courſe lieth northweſt 3 leagues.

Betwixt Haesbrough and the Admirals houſe ſtands a ruinous tower upon the ſtrand, When as you keep it and the ſteeple of Haeſbrough one in the other comming from the northwards, then you run right upō the point of the foreſaid riffe. Foure leagues without the land lieth Winterton ſand, the ſouth end whereof lieth about eaſt, and the north end northeaſt from Winterton.

Thwart of Admirals houſe, not far from the ſhore, lyeth alſo a litle plate where no ſhip can go over, but if you goe in 6 or 7 fathom, you cannot ſaile to neare it, you may alſo run thorough in two fathom, betwixt this plate and the land.

From Haesbrough to Cromer the coaſt lieth alongſt northweſt and by weſt, and weſtnorthweſt 3 or 4 leagues.

Of depths and ſhowlds about theſe places, and in what depths men may ſee the land.

FIue or 6 leagues without Leyſtaffe and Yarmouth ſoutheaſt and by eaſt into ſea it is 27 & 28 fathom deep, there you may ſee the land.

Foure leagues eaſt and by ſouth from land, without the Holmes of Yarmouth, lieth a bank called the Newſand, which is not deeper then two fathom.

Eaſtnortheaſt at leaſt 7 leagues from land thwart of Yarmouth it is 15 fathō, the ground red groſſe ſand, with litle round ſtones, being there, you may even ſee the land from below.

Thwart of Winterton and Cromer 7 or 8 leagues from the land it is 18 and 19 fathom deep, and there you may ſee the land.

Winterton ſand lyeth 4 or 5 leagues from land northeaſt from Winterton.

What moon maketh high water at theſe places, and of the courſe of the ſtraines.

AT Leyſtaff & Yarmouth a ſouthſoutheaſt moon maketh high water.

Without the banks of Yarmouth, and before Cromer, a ſ.e. Moon maketh full ſea.

Betwixt the banckes of Harwich and the Holms of Yarmouth the flood falleth ſouth, and the ebbe north

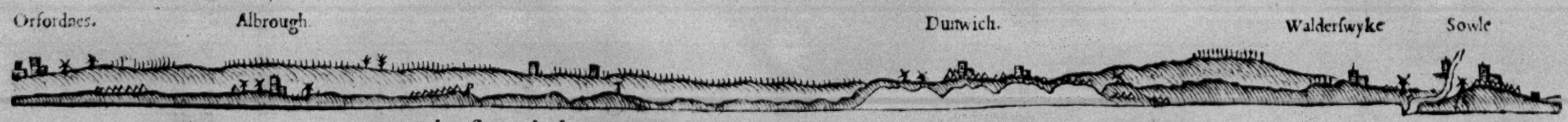
Thwart of the banks of Winterton & Cromer the flood falleth ſ ſ.e. & the ebbe n. n.w.

How theſe foreſaid places doe lye from other lands.

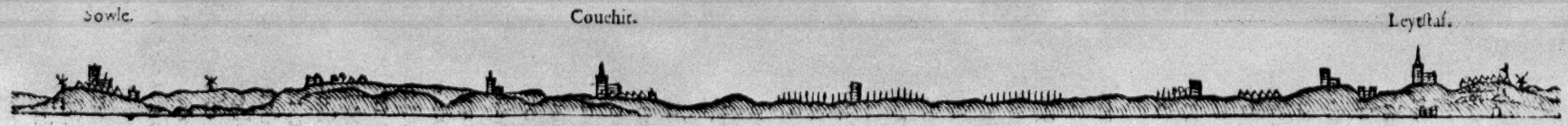
FRom Yarmouth or Leyſtaff to Walcheren or the Wielings ſoutheaſt & ſoutheaſt and by ſouth 38 or 40 leagues

From the point of Cromer or Shield, to the Teſſell the courſe is eaſt 40 or 42 leagues

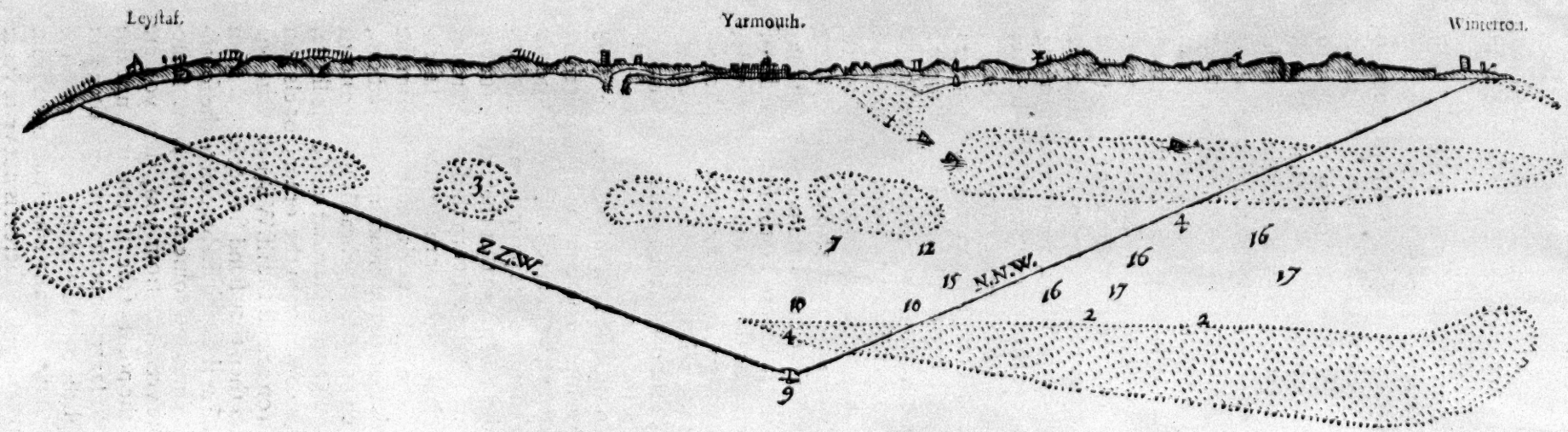
Howv theſe lands doe shevv themſelues at ſea.



Thus ſheweth the coaſte of England betwixt Orfordnes and Sowle or Sowlehauen.

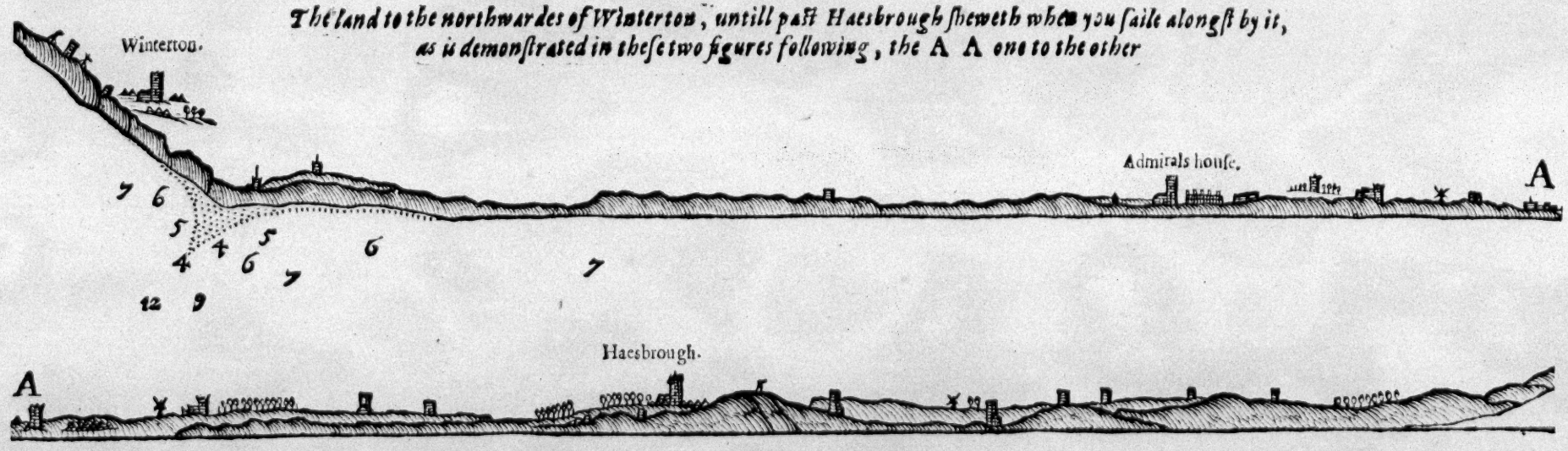


Thus ſheweth the land betwixte Sowle and Leyſtaf.

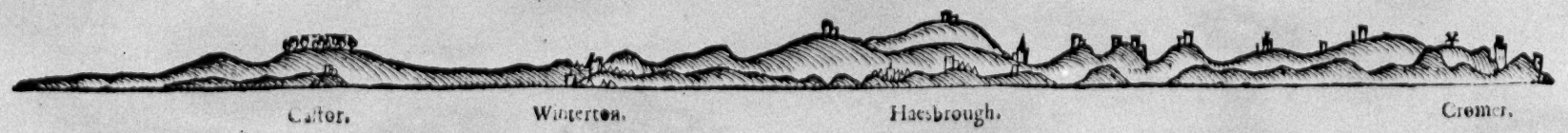


Thus ſheweth the land betwixt Leyſtaf and Winterton.

The land to the northwardes of Winterton, untill past Haesbrough ſheweth when you ſaile alongſt by it, as is demonſtrated in theſe two figures following, the A A one to the other



Thus ſheweth the land alongſt the north coaſte of England, betwixte Yarmouth and Cromer, when you ſaile through within the bancks.



CHAPT. III.

Of the North coasts of England, betwixte Cromer and Flambrough head.

THe land lyeth from Cromer to Bornum first westnorthwest, and west & by north, and then west, and west and by south nine or ten leagues. From Cromer to Blakeney it is 3 or 4 leagues. At Blakeney standeth a high steeple, which you may see alongst farre over the land, when it commeth to the litle steeple, then you haue the first buye of the channell, which lieth at the south ende of the Pol, which is a sand at the west side of the channel of Blakeney, goe from the first buye to the other, and alongst by them, untill you come within the hauen. This is a tydehauen, where men doe lye drye at low water.

Blakeney.

Foure leagues to the westwardes of Blakeney lyeth Wells, betwixt them both lyeth the foresaide shoulde, called the Poll and Pyper, there it is shoulde farre off at sea. At the west ende of this shoulde, goeth in the Deepe of Wells, the beacons that you must saile in alongst by, stand all alongst by the Pyper. When Hoebrom standeth southsoutheast from you, then you are to the westwardes of the Pyper, thwarte of it is good roade in sixe fathome. Welles lyeth then southeast from you, and the trees stand then also against the steeple, then you may sail open into the hauen of Wels, alongst by the foresaid beacons.

Pol & Piper.

Wells.

Betwixt Wels and Bornum lieth a banck, you may ride under it in fiue or six fathome, at halfe floude there is upon it no more then two fathome water.

He that will saile into Bornum, must goe in at high water, & he must bring the steeple against the black house, and saile in so by the beacons, leaving them on the larboard side. These are all tidehauens.

Bornum.

From Bornum to Chappel the course is westsouthwest two leagues, to the northwardes of it lieth the Sonck, which is a sand that falleth drie at low water. You may saile about on both sides of the Sonck unto Lin.

Chappel.

The Sonck.

For to saile into the Easter channel of Linne, then saile aboute to the eastwards of the Sonck, and bring that woode of trees, over the pointe of Sitsein or Snetsham, and Chappel east from you, then go in southeast and by south, and you shall finde the first buye, then in south and by west, and southsouthwest and by little and little more westerlie, untill you come aboute the pointe, there the buyes and beacons shall shewe you the waie.

Easter channell of Lin.

When you come aboute the point, then you may runne through the sands, into the norther channell, and saile out againe by the same into sea, by the buyes and markes that are thereof. This norther channel lieth into sea northeast, & northeast and by east, and is verie well buyed & beackoned.

You may also saile into the westwards of the Sonck, to wete, south and by east in alongst by it and so runne to the first buye, and then from the buye alongst by the beacons, unto Lin before the towne. When you come from the eastwardes, you may well run through within the Sonck, alongst by the land, close alongst by Chappell, and in south and by west unto the foresaid first buye.

Wester channel of Lin.

For to saile from Cromer or Blakeney to Boston deepe, you must goe on west and by north, until you come by the land betwixte the Hommer and Lagernesse. From the Sonck lieth a long banck, called the Flats, north into sea a league, which at lowe water falleth drie at divers places. You runne with the foresaide west & by north course, (when you are by Cromer or Blakeney a litle without the land) alongst without, or to the northwardes of this banck, at high water you may well goe over it, the grounde on the east side goeth up flat and plaine, run boldly to it without feare, untill you come in foure or three fathome, he that useth his lead can take no hurte of it, but on the inner side, that is, on the west side it is verie steepe, so soone as you be over the shouldest, you shall get soddenly deepe water, and good sand ground, under it or within it, is good ryding for easterly windes.

Boston deepe.

The flats.

For to saile into Boston deepe, through within the Knock or Elleknock, you must keepe the sounding of the shoare in foure or fiue fathome, so longe until that the pointe of Lagernesse be westnorthwest from you. Betvvixt the shoare and Elleknock remayneth at lowe water fiue fathome in the middest of the channell, but Elleknock falleth drye at lowe water. When that Lagernesse is westnorthwest from you, then goe on southeast, through betvvixte Elleknock and the shoulde, (which shooteth off from the shoare to the westwardes of Lagernesse) untill that you gette againe depth of sixe or seuen fathome, in this going over remayneth at lowe water, no more then two fathome, but it floweth there aboute three fathome up and downe. Being over it, then go on southwest alongst betwixt Longsand & the shoulde, which lieth off from the shoare, there it is deepe betvvixt them both nine and tenne fathome, you may sounde both sides, (as well the shoulde which lyeth off from the land, as Longsand) in fiue fathome, but

For to saile into Boston deepe.

Elleknock.

Longsand.

De Noordkusten van Engellandt tusschen Crammer en Flamborger hooft

Lint

Walpoel

Snitteshum

Sutsen

Capelle

Sonck

Bornum

Flats

Geps

Wellas

Blakeney

De Welle

Crommer

Haesborgh

De pol en peper

Het half by

8

6

10

12

Duitsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graedt

Eng: en Fr: mijlen 20 in een graedt

Boston

Batterwijck

Wyngel

Wijnfliet

Lagerneß

Skegnes

Engemeels

Wilgrij

Saltfliet

Grimsbij

Humber fluvius

Hul

De Hul

De Hommer

Paels

Poltoren

Spurnhead

Ravenspure

Kolbijen

Doesbijn

Sustern

Hornsey

Bridlington

Flamborgh

Flamburger hooft

34

but the flat is somewhat steeper then Longsand.

Ingoldmilles. For to saile without Elleknock into Bostons deepe, comming (as is before saide) to the west land, you must locke out for the two steeples of Ingoldmilles, standing somewhat to the northwards of Lagernesse, bring them one in the other, and then they shall stand aboute northnorthwest from you, keep them one in the other, and goe on southsoutheast, untill that the trees upon the point by west Lagernesse, come without the point of Lagernesse, and then you runne through betwixte Elleknock and Dogshead, (that is a showlde without Elleknock) When these aforesaid trees come a handspikes length past, or to the eastwards of the pointe of Lagernesse, then goe on southwest, and then you runne right into the deepe, betwixt Elleknock and Longsand, and so you shall finde betwixt Elleknock, & the point of Longsand fiue fathom depth, being past Elleknock, it will be 8, 9, and 10 fathom deep.

Dogshead.

If you will saile out of the sea into Boston deepe, and not alongst by the land, as is before said, then bring the foresaid trees a handspikes length without the point of Laegernes, which shall then stand from you about westsouthwest, saile in so right with them, untill that the high land within Laegernes or Winfleet beginne to come euen without the point of Laegernes, which shall then be from you somewhat more northerly then west, then you are within the point of Longsand. Or els there stand three little houses on the sea side, about half waies betwixt Laegernes, and Ingoldmilles, when they come to be northwest from you, and those foresaid trees without the pointe, then you are also within the point of Longsand, goe in then s. w. betwixt Elleknock & Longsand, as aforesaid. A litle past Lagernes lyeth a showld or plate about the middest in the farewaie, but neerest Longsand, whē the trees upon the point to the southwards of Winfleet come in the second valley of the high land within Winfleet, then you are right thwart of this showlde, edge therefore to one side or other, rather towards the showlde, there it is widest, keep boldly the sounding of the showlde, and runne southwest alongst by it, untill that the steeple of Boston come over the steeple of Butterwyke, that is also a flat steeple, (but smaller then that of Boston) standing in a wood of trees, thwarte of it runneth the showlde somewhat off with a point, being past it, goe on westsouthwest all alongst by the foresaid showld, untill that the greate steeple of Boston come over the second mill, there it is good anckering by the west shoare in fiue fathome at low water. He that commeth there at low water, must ancker and staye for the tyde untill halfe floud; before that you may not saile further in from thence, and then you shall not also find more then two fathom upon the shewldest.

Butterwyke.

From thence the Deep lieth in alongst by the beacons about south to the third beacon, being past that westsouthwest, and then by little and litle, more westerly and northerly, but run alalongst by the beacons, leaving them on the starboard side, at last on north into the river.

Upon the point of the river standeth a house, which is a sheephouse, before that you come by it, it seemeth as if there were no opening, by reason that it is all euen green land, run in by it, all alongst by the land, being past it, the river doth open it self. Being come within the points you must run in betwixt two dikes, a league up until you come before the towne, in the River it is at half floud everie where deepe ynough. When as that you come a litle within the houses of the towne on the larboard side, there you must let fall your anker, and stay until that the water begin to fall, then you shall haue floud ynough for to driue to the Kay, there you make fast with one cable, it doth not begin to ebbe there, before that the water be fallen three foot.

An east and west moone maketh in Boston deepe the highest water, but before the towne an east and by south and eastsoutheast moone. He that commeth from Boston, and will saile out at the Deep with a high water, let him look out for the foresaid high land within Lagernes, when that cometh behinde the point of Lagernes, then he may boldly set his course whether he desireth to be, either to the eastwards, northeastwards or northwards, there is nothing then that can hurt him.

From Lagernes to the Hommer it is aboute seuen leagues, most north, betwixt them both, about a league to the southwards of the Hommer lyeth a place called Saltfleet hauen, a litle to the northwards of a sharpe steeple called Wilgrip, Thwarte of that foresaid Saltfleet hauen, about an Englisch mile from the shoare lyeth a banck or Sand plate, not verie great, which at low water falleth almost drye, you must runne about without it, and leaue it lying towards the land from you, but yet for need you may also saile through within it.

Plate by Saltfleet hauen

For to saile into the Hommer cómming from the northwards, you must saile alongst by the shoare, and runne about by the north point, but comming by the pointe you must keepe somewhat off from the shoare in foure or fiue fathome, for to avoide a litle taile, which lyeth off from the point, being about it, runne to the little Iland, which lyeth a little by west that foresaid north point.

For to saile into the Hommer.

If comming from the southwards you desire

to

to ſaile to the Hommer, then bring the Pawle Steeple (which is a high ſharpe Steeple ſtanding on the North ſide of the Hommer) a little by South the North point of the Hommer, or ouer that foreſaid little Iland, and ſaile ſo right in with it, vntill that you come by that little Iland, being come by it, leaue it on the Starboord ſide and run in cloſe by it, for to auoid a great Sand called the Bull, which lieth off from the South ſhoare almoſt vnto that little Iland. When that you come within that little Iland, then bring the two Beackons (which ſtand vpon that little Iland) one in the other, keepe them ſo ſtanding, and ſaile ſo on to the Weſtwards towards Grimſby, you leaue the Buye vpon the Bull lying then on the Larboord ſide, and run along to the Northwards of it: In this faire way it is ſeuen and eight Fathom deepe. You may not come neerer the Bull then in ſixe Fathom.

Read before Grimsby. Before Grimſby you may ancker in three or foure Fathom at lowe water, it floweth there at leaſt three Fathom vp and down, a Weſt Southweſt and Eaſt Northeaſt Moone maketh before the Hommer the higheſt water. Within the foreſaid little Iland at the North point of the Hommer, you may anckor in three or foure Fathom: There lie commonly Ships that are bound out, and tarrie for the Wind.

From Grimſby in alongſt to Hull, the courſe is Weſt Northweſt to the end of the Banke or ballaſt plate, which you muſt leaue lying on the North ſide. On the South ſide lyeth alſo a little plate, there ſtandeth commonly a Beackon vpon it, that you muſt leaue on the Larboord ſide and run alongſt to the Northwards of it, being paſt it, you may run alongſt by the South ſhoare in three Fathom. The faire way there is foure, fiue, and ſixe, and thwart of the foreſaid Beackon eight and tenne Fathom. When you come to the end of the Banke, you muſt edge vp to the Weſtwards about by the Point on the South ſide, but there runneth off a Flat which you muſt auoid. Being a little about that Point you ſhall ſee the Towne of Hull lye before you, there you may anckor before it in ſixe, ſeuen, or eight Fathom: An Eaſt and Weſt Moone maketh full Sea before Hull. He that will anckor vpon the ballaſt plate, let him bring the flat ſteeple which ſtandeth a little to the Northwards or the Eaſtwards of Hull to the high point of Pael, and keepe them ſo ſtanding vntill that he come to the plate, there it is beſt for to anckor vpon it.

From the North point of the Hommer called Spurne head to Flambrough head, the courſe is North and by Weſt eight or nine Leagues, betwixt them it is ſhowld water of ſix, ſeuen, and eight Fathom deepe. Flambrough head hath many white ſpots and Chalke Hills, eſpecially vpon the North ſide towards Fyley. Flambrough hath a Head or Piere. A League to the Weſtwards of it on the South ſide lyeth a little Towne called Burlington, which hath alſo a Piere. You may anckor there in the Baye in ſixe or ſeuen Fathom. Flamborough head. Burlington.

Of the depths thwart of theſe Lands.

THwart of Winterton and Cromer ſeuen or eight Leagues from Land it is eighteene and nineteene Fathom deepe, and there you may ſee the Land. Northeaſt and Northeaſt and by North from Cromer lyeth a Banke, whereupon remaineth at halfe Flood no more water then foure Fathom, from thence you may ſee the Land indifferent well.

North and by Eaſt from Blakeney lyeth a Banke, whereupon remaineth at halfe Flood no more water then fiue Fathom. In eighteene Fathom thereaboutes you may ſee the Land. From thence to the point of Chappell it is all ſhowld.

About North Northweſt and North and by Weſt from Winterton Sand lyeth the Banke before Cromer fiue Leagues without the Coaſt.

To the Northwards of the Hommer of Hull you may ſee the Land in fiue and twentie Fathom.

Of the Tydes and courſe of the Streames about theſe foreſaid places.

BEfore Cromer a Southeaſt Moone maketh high water.

At Blakeney, Wels, Bornum, and Lyn, an Eaſt and Weſt Moone.

Before the Hommer of Hull an Eaſt Northeaſt and Weſt Southweſt Moone.

From Blakeney to Flambrough head the Flood falleth Southeaſt, and the Ebbe Northweſt.

1 2 3 4 5 6 7

Duytsche mylen 15 in een graedt

1 2 3 4 5 6 7 8

Spaensche mylen 17½ in een graedt

1 2 3 4 5 6 7 8 9 10

Eng: en Fr: mylen 20 in een graedt

NORT RIDING.

Berlington

Flamborgh

Flamburger hooft

Fyley

Fyley crake

Scharenborgh

Romenhoogt baij

Withby

Mompelgare

De Noord-Cust van Engelandt tuſschen Flamburger Hooft en de Rivier van Nicaſteel.

Nicaſteel

Haeſoort

Tees fluv.

Stocton

Vierboeden

Tese

DVRHAM

Hertypole

Sonderlandt

Pops

Vierboeden

3. Reven

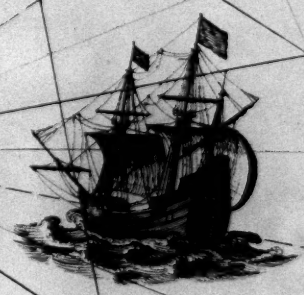
Roetlyf

Kompshoec

Tyn fluv.

Tynmouth

t' Slot



How these lands are lying one from the other, and from other lands.

FRom Cromer to Blakeney westnorthwest — — — 3 or 4 leagues.
From Blakeney to Bornum through within the sand west — 7 leagues.
From Bornum to Chappel westsouthwest 2 le.
From Chappel to Elleknock, or the north point of Boston deepe the course is northwest and by north — — 5 leagues.
From thence to the north pointe of Cromer north, and north and by west 7 leagues.
From the north point of the Hommer to Flambrough head n. n. w. — 9 leagues.
From the point of Cromer or Shield to the Tessel east — — 40 or 42 leagues.
From the north point of the Hommer to the Tessel east and by south and eastsoutheast — — 60 leagues.

Heights of these foresaid places.

YArmouth lieth in 52 degrees 52 minutes.
The north pointe of the Hommer of Hull in — — 53 degrees 20 minutes.

CHAPT. IIII.

The Coast of England betwixt Flambrough head and Tynmouth, or the river of Newcastle.

THree leagues by west Flambrough head lieth Fyley, in a rounde baye to the southwardes of a pointe that lieth out, which hath a Pier or Head, where you may lye within it, but it falleth there drie at lowe water. Fyley.

Without the head of Fyley lyeth a rock under water, called Fyley bridge, betwixt it and the Pier you may well lie aflote with a shippe of an hundred lasts, in fiue fathome at low water, and haue shelter for a northeast and east winde. Fyley Bridge.

From the point of Fyley to Scharbrough it is northwest two leagues. Scharbrough hath two Pieres or Heads, where you may runne within them at high water frō the southwardes, but at low water it falleth there also drie. Men come in there from the southwardes. Schar-brough.

From Scharbrough the coaste lyeth alongst by Robbinhoods bay, untill before Whidbye, most northwest, but past Whidbie the land falleth in westnorthwest, and by little and little more wester lie unto the Tees. Robbin-hoods baye. Whidbye.

Robbinhoods baye is a good roade for a southsouthwest and west winde, there men lie in 7 or 8 fathome.

Whidby is a tidehauen, which falleth drie at lowe water, at the east side of the hauen runneth off a riffe of rocks, whereof you must take heede. For to saile in there, you must runn in betwixt the two beackons, until that you come in betwixt the two lands, and ancker there.

From Whidbie to the Teese the coaste lyeth most westnorthwest, and west and by north, about seuen leagues, betwixt both lye Huntleyfoote and Redcliffe. Huntley foote is a high hill, lying on the sea side, aboute foure leagues to the eastwardes of the Tees. Redcliffe lyeth aboute halfe waies betwixt Huntley foote and the Tees, it is a cliffe of such verie redde earth, that when the sunne doth shine against it, it is to see to like redde cloth: these two are verie good markes, for to knowe this coast by. Huntley foot. Redcliffe.

Close to the southwardes of the mouth of the Teese lye three Riffes, which lye aboute a halfe league eastnortheast into sea, which are verie foule and stonie, and fall drie at low water, upon the north side they are verie flatte, so that you may sounde aboute by them, in fiue, sixe, and seuen fathome, but on the south side are so steepe, that comming neare them, and sounding in 13 and 14 fathome, you should be upon them, before you should be able to heaue the lead the second time.

A league and halfe to the northwardes of the Teese lyeth Hartlepoole, upon a pointe that lyeth out almost like an Iland. For to goe in there you must runne into a bight to the southwards of the towne within a head, untill you come against the towne, there you shall lie drie at low water.

About halfe waies betwixt Hartlepoole and the Teese, runeth off also a riffe of rocks thwart from the shore a good waies into sea, come no nearer it then in 5 or 6 fathome. There standeth a mill to the northwardes of the towne Hartlepoole, if you keepe that to the west side of the towne Hartlepoole, then you cannot fail upon that foresaid rif, but if you bring the foresaid mil a litle to the westwards frō the town, so that you Hartlepoole.

may plainely ſee through betwixte the mill and the towne, then you ſhall not faile to ſaile upon that riffe.

For to ſaile into the Teeſe

For to ſaile into the Teeſe comming from the northwardes, you muſt obſerue theſe markes following. A good wayes to the northwardes of Hartlepoole, a little to the ſouthwardes of Sonderland, and a little within the land lye upon the high land, two hommockes cloſe one to the other, verie good to be known,

The Paps.

of faſhion like womens breaſts, called the Paps, keepe theſe two hommocks euen without the pointe of Hartlepoole, which ſhall then ſtand from you northweſt and by north, and ſaile ſo on to the ſouthwardes, and you ſhall fall before the Tees, and ſhall not ſaile too neare the ſands that lie out before the mouth of the Tees, and lye off aboute a halfe league into ſea.

On both ſides, as well on the north ſide, as the ſouth ſide of the Tees ſtand two little white houſes for firebeacons: If you come from the northwardes and get ſight of them, then bring firſt the two ſouthermoſt one in the other, which ſhall then ſtand from you ſouth and by eaſt, ſaile right in with them, untill that the other two, which ſtande on the north ſide of the Teeſe, come alſo one in the other, then leaue them on the ſouth ſide, and ſaile in right with them that ſtand on the north ſide, and ſo you ſhall runne in amidſt the channell, there is upon the barre, or ſhouldeſt, at lovv water no more then fiue foote, but it floweth there with a common tide, at leaſt two fathome up and downe. A ſouthweſt moone maketh there full ſea. If when you come from the ſouthwardes, you will ſaile into the Teeſe, then bring the innermoſt of the two firebeacons (which ſtande on the north ſide) at leaſt a handſpikes length, or the length of a capſtone barre, to the northwardes of the other, and runne ſo weſtwardes towardes them, untill that the two firebeacons on the ſouth ſide are one in the other, then ſaile in right with them, as hath beene ſaide, untill that the two firebeacons on the north ſide come one in the other: when you haue them one in the other, runne in right with them, untill that you come by the north ſhore, & then cloſe alongſt by it.

When as that you come ſo farre in paſt the firſt firebeackon, to wete, that you may ſee Hartlepoole betwixte the two firebeackons, there you may ancker in three, four, or fiue fathome, or when Hartlepoole commeth betwixte the foreſaide firebeacons, then go ſouth-ſouthweſt, untill that you come by the ſouth ſhoare, there it is alſo good anckering. Further it is Pilots water unto Stockton, for there within, the Deepes doe ſhifte oftentimes, and that in ſhorte time, three, four, or fiue times in a ſummer.

He that will ſaile in there with northerlie windes and a floud, muſt reckon well his tides, for the floude falleth ſtrong to the ſouthwardes over the groundes, and ſhould thereby bee lightlie carried behinde the banck to the ſouthwardes of the buye, which lieth upon the pointe of the banck.

For to ſaile to the neue channel.

Beſides this foreſaide channell there runneth yet another channell through the groundes, which lie off from the north point of the Tees. For to ſaile in there, you muſt take marke of the two high lands within the land, to the ſouthwardes of the Tees, bring them within a handſpikes length one to the other, or bring the Paps to the weſt ſide of Hartlepoole, then ſhall alſo the foreſaide two high lands come within a handſpikes length neare one to the other, ſaile in right with them, and ſo you ſhall runne right into that new channell, alongſt through that aforeſaide ſand, and come againſt the buye (upon the ſandes, on the ſouth ſide of the Deepe) againe in the right farewaie. When that you get againe deeper water, or haue the two firebeackons on the north ſide one in the other, then goe in towardes them, and further as hath beene before ſaide.

Sonderland.

Aboute ſeuen leagues to the northwardes of the Tees lyeth the river of Sonderland, a little to the northwards of the Paps, which are verie good markes for to knowe the land by there aboutes. When the Paps are ſouthſouthweſt from you, and that you are aboute an Engliſh mile from the land, then you are right before the river of Sonderland, the grounde is there aboutes indifferent cleane, but ſomewhat ſtonie, you may ancker there in four, fiue, and ſixe fathome. On both ſides, as well on the north pointe, as the ſouth pointe of the River it is ſtonie. On the north pointe ſtandeth a beackon in the water, there you muſt runne in, within a litle ſhippes length alongſt by it, being paſt that you ſhall gette deeper water, to wete a fathome and halfe, and two fathome at low water, but upon the barre remayneth no more then three foote. With a common ſpring and high water there is aboute two fathome and a halfe, or a little more.

After this aforeſaid firſt depth of a fathome and a halfe or two fathome, you ſhall meete againe with a ſtonie floore, about three ſhippes lengths broade, upon it it is at high water about eleuen or twelue foote deepe, according as the tydes ſhall runne: being over there, it is againe deeper. A little paſt that is a narrowe place, where a long ſhippe ſhall ſcarce be able to wend, within it, it is wide enough, and everie where good ancker ground.

From

From the Tees to Tinmouth the courſe is northnorthweſt eight or nine leagues. Two leagues to the ſouthwards of Tinmouth lyeth the pointe of Sonderland, but cloſe to the ſouthwardes of Tinmouth goeth in the river of Newcaſtle. From the pointe of Tinmouth ſhooteth off a ledge of rocks, you muſt ſaile in by it, leaving it on the ſtarboarde ſide. The markes for to ſaile into this River are two fire-towres or firebeackons, which ſtand upon the north ſhoare, bring them one in the other, or the innermoſt (that is the higheſt) a litle to the northwardes of the outermoſt or loweſt, and ſaile ſo right in, alongſt by the aforeſaid ledge of rocks on the north ſide, and ſo you ſhal haue upon the ſhouldeſt two fathome at halfe floud, a ſouthweſt moone maketh there full ſea. The ſouth ſhoare is flatte, you may leade it in there with the ſounding pole, for ſhippes that goe not deepe, in tenne foote at halfe floude. When you come within, runne all alongſt by the north ſhoare, untill paſt the little towne Sheels, edge then over to the other ſhoare, untill you come through the crooked reach, there the river lieth up againe a little to the northwardes, and then to the ſouthwards to Hawkes-bill, and aboute by it to the towne Newcaſtle.

In what depths men may ſee theſe foreſaide lands.

FLambrough head men may ſee in fiue and thirtie fathome.

Scharbrough men may ſee from below in fiue and fortie fathome.

Of the tides and courſe of the ſtreames thwart of theſe coaſts.

AT Flambrough and Fyley, in the Peer a weſtſouthweſt moone maketh full ſea.

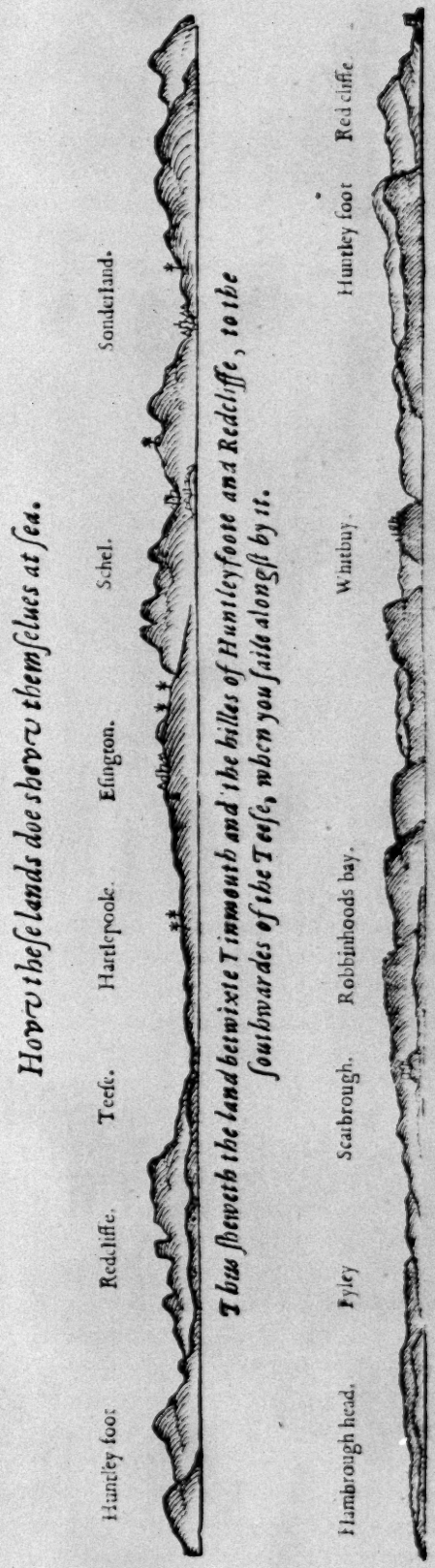
At Scharbrough and Robbin hoods baye a ſouthweſt and northeaſt Moone.

In the Tees and at Hartlepoole alſo a ſouthweſt and northeaſt Moone.

Before the river of Newcaſtle a ſouthweſt and northeaſt moone maketh alſo the higheſt water.

Thwart of Flambrough head, Scharbrough, the Teeſe, and alſo thwarte of the river of Newcaſtle the floude falleth ſoutheaſt, and the ebbe northweſt.

To the northwardes of the Tees, the floud falleth ſouthſoutheaſt alongſt the land, and from the Teeſe to Scharbrough ſoutheaſt and by eaſt.



How theſe lands doe ſhewe themſelues at ſea.

Thus ſheweth the land betwixte Tinmouth and the hilles of Huntleyfoote and Redcliffe, to the ſouthwardes of the Teeſe, when you ſaile alongſt by it.

Thus ſheweth the land betwixt the Tees and Flambrough head when you ſaile alongſt by it.

How these lands doe lye one from the other, and from other lands.

FRom Flambrough head to Fyley northweſt — — 3 leagues.
From Fyley to Scharbrough northweſt — — — — 2 leagues.
From Scharbrough to Whidbye northweſt and by weſt — — 5 leagues.
From Whidbie to the Teeſe, the courſe is firſt weſtnorthweſt, and afterwards weſt and by north — — — 7 leagues.
From the Teeſe to Tynmouth northnorthweſt — — 8 or 9 leagues.
From Whidbie to Tynmouth the courſe is northweſt and ſoutheaſt — 16 leagues.

Heights of theſe lands.

FLambrough head lieth in 54 degrees 5 min.
Scharbrough in 54 degrees 12 minutes.
Tynmouth or the River of Newcaſtle in 55 deg.

CHAPT. V.

Of the Coaſts of England and Scotland betwixt Tynmouth, and the River of Dondee.

SEuen or eight leagues to the northwardes of Tynmouth lyeth the Cocket Iland. Betwixt them both about half waies lieth à River called Bly, where the French men doe much ſaile to fetch coales. From the north point of this river runneth off a ledge of rocks a greate ſhot of a caſt peece, aboute ſoutheaſt into the ſea, but the ſouth ſide, and the coaſte to the ſouthwards of it, is verie cleane and ſand ſtrand. Upon the ſouth point ſtand two beackons: if you will ſaile in there, bring them one in the other, and ſaile right in with them, and then you can take no hurte of the foreſaide ledge or riffe of the north pointe. When that you come by or thwart of the outermoſt of the two foreſaide beackons, you ſhall yet ſee there by it an other ſmaller beackon, that ſtandeth upon a litle ledge of rocks, that ſhooteth off from the ſouth point, leaue that on the larboard ſide, and runne in alongſt cloſe aboute to the northwardes of it. The foreſaide ledge of rocks on the north ſide remaineth at high water (a good waies from the land, and alſo at a ſpring tide) aboue water, within it is a bight, there it is good lying for a north or northeaſt winde, and there remaineth at low water two fathom depth. In the mouth of the River it is with an ordinarie tide and high water about two fathome deepe, or ſomewhat more, and it floweth there two fathome up and downe, ſo that at low water it falleth almoſt altogether drie.

Bly.

Cocket Iland. The Cocket Iland is a verie litle Iland, and not high, it lieth aboute a half league from the land, you may come to ancker within it for an eaſt, ſouth, and ſoutheaſt winde, but the winde comming to the northwards of the eaſt, maketh there a bad roade, for you muſt lye betwixt the Iland and the maine land where you haue no ſhelter for a north winde. On the ſouth ſide of the Iland the grounde is foule, and a litle to the ſouthwards of the Iland, runneth off a foule ledge of rocks from the ſhoare, untill thwarte or paſt the Iland. He that cometh from the ſouthwardes, muſt keepe the Caſtle of Bambrough without the Iland, or els he ſhould not faile to ſaile upon the pointe of that foreſaide ledge.

Betvvixt that ledge & the Iland it is alſo verie narrowe, ſo that a man ſtanding at low water marke upon the rocks of this ledge, ſhould almoſt be able to caſt with a ſtone unto the Iland. For to ſaile in there, take heed unto theſe marks hereafter deſcribed: there ſtandeth a houſe upon the ſea ſide, which is a ſalt kettell, and alſo a caſtle ſomewhat further in within the land, which doth ſhewe it ſelf high enough, bring them one in the other, and then they ſhall ſtand ſomewhat more northerlie then weſt from you, and runne ſo right in with them, and ſo you ſhal runne in right amidſt the chanell betwixt both, being come vvithin, edge up behinde the Iland, and ancker there in fiue or ſix fathome.

About this Iland there run alſo manie more divers litle Rivers into the land, but they fal moſt drie at low water.

From the Cocket Iland to the Staples the courſe is northnorthweſt eight or nine leagues, The Staples, that are high Ilands and rocks right to the eaſtwardes of Bambrough, lying at leaſt three leagues from the land northeaſt into ſea, a litle to the northwards of them lyeth the Holie Iland. To the ſouthwards or the weſtwards of the Holie Iland is a baye, where you may lye landlockt almoſt for all vvindes, againſt the Caſtle is the beſt roade: you may alſo run in there from the ſouthwards, through betvvixt the Staples and the maine land.

Staples.

Holy Iland.

Betvvixt

Stap'es.

Holy Land.

Dunſtſche mylen 15 in een graedt

Spaenſche mylen 17½ in een graedt

Eng: en Fr: mylen 20 in een graedt

Ryver van Nazyfeel

Tinby

Gilby

Ailemouth

Dunſtaburgh

Bamburgh

Yarmemouth

Goſunck

Coket oſte Coggen eylant

Goutſtern

Plegels

Staples

De Schylen

De Cuſten van
Engelandt
en Schotlandt
tuſſchen
Tinbÿ en Donde

Edenburgh

Korÿn

Queens feer

Liet oſte
Seeton

I. Hemkieff

St Ianes

Castel

St Andreas

Athen

Bas

Vyfles

Bar
wyck

Lamertoun

St Abbens
hooft

I. Maij

't Schaep

Bergsht

36

Betwixt the Staples and the Holy Iland lye two suncken Rockes, which at low water come verie neere euen with the water, the westermost towards the holy Iland, is called the Goldstone, the eastermost by the Staples, is called the Plough. For to auoid them when you will saile through betwixt the Staples & the Holy Iland, whether you come from the Southwards or the Northwards, then bring the Steeple of Teustenbrough ouer the Castle of Bambrough and keepe them so standing, and then you shall run through betwixt them both, this Channell lyeth so through Northeast and Southwest. From the outermost end of the Staples to S. Abbens head, the course is Northwest seuen or eight Leagues.

Goldstone.

Plough.

From Holy Iland to S. Abbens head it is North Northwest seuen or eight Leagues.

S. Abbens head.

To the Northwards of S. Abbens head men doe runne in vnto Lieth and to Edenbrough in Scotland.

S. Abbens head and the Iland the Bas lye East and West foure Leagues asunder. The Iland May and S. Abbens head Northwest and Southeast foure great Leagues. May and Bas lye one from the other Southwest and by West and Northeast and by East three Leagues and a halfe. The Bas is a high round Rocke cleane round about, which you may saile alongst by on both sides. Betwixt the Rocke & the South Shoare it is ten and twelue Fathom deepe, but the common faire way is alongst to the Northwards of it. Betweene S. Abbens head and the Bas it is most part a cleane Coast, but without Anckor ground. The Iland May is greater then the Bas, and also cleane round about, except on the East side, there it is foule.

The Bas.

Iland May.

From S. Abbens head alongst to the Northwards of the Bas, the course is West and by North, and West Northwest foure Leagues, and from by North the Bas to the Iland Inchkieth West and West and by North about fiue Leagues. Betweene the Bas and Inchkieth by the South shoare lye many Rockes, little Ilands and foule grounds, where at diuers places is road, but are not to be vsed, but by them which are there verie well acquainted. Inchkieth and the Iland May lye Southwest and by West, and Northeast and by East seuen great Leagues asunder. Inchkieth is somewhat a long small Iland, a League to the Northwards of it lyeth an out-point on the North Coast called Kingornesse, before it and about it lie some little Rocks vnder water, but a little to the Eastwards of the point is good Anckor ground & road for Westerly Winds. Betweene that point and the Iland May, or the point of Fifsnes on the North shoare lye diuers little Hauens, whereof some of them doe also yeeld out Coales, but are little or no thing vsed by the Hollanders. On both sides of Inchkieth is good ground, and good lying as well for Westerly as Easterly winds.

Inchkieth.

Kingornesse.

From Inchkieth to Lieth it is Southwest a League. Before Lieth about halfe an English Mile from the shoare lieth a Rocke vpon which standeth a Mast (with a crosse or some other thing of wood vpon the top of it) for a beackon. At high water the Sea floweth ouer it, and at low water it falleth dry. With a spring tyde at low water men may goe on foot to it. From the East side of that Rocke lyeth off a Riffe almost vnto Inchkieth. You may also run through to the Southwards of Inchkieth betwixt that foresaid Riffe and the South shoare, but it is not to be done, but by them which are there exceeding well acquainted: There it is altogither full of Rockes and foule ground. When as you saile in to the Northwards of Inchkieth you must leaue the foresaid Mast on the Larboord side, and run about to the Northwards of it, & then towards the South Shoare, and anckor about halfe an English Mile by West Lieth, and also halfe an English Mile from the Shoare, in sixe, seuen, or eight Fathom. Lieth is the Hauen of Edenbrough, a tyde Hauen which falleth dry at low vvater.

Lieth.

From Lieth to Queenes Ferrie there lye on both sides many Rockes, some aboue and some vnder vvater. In the Narrovv before Queenes Ferrie lyeth a little Iland called Inchgarue vvhich you must runne alongst to the Northvvards of, on the South side it is vvith a Stone banke (vvhere men may goe ouer at lovv vvater) fast to the maine Land, alongst to the Northvvards of it, it is cleane and deepe. Within that little Iland lye Caryn and other places more vvhere men doe lade Coales,

Queenes Ferrie.

Vnder the East side of the Point to the Northvvards of Queenes Ferrie is good road in tvvo, three, or foure Fathom, according as you lye farre from the shoare.

A League North from the Iland May lyeth the Point of Fifsnes, lying from S. Abbens head Northwest and by North fiue great Leagues. From thence to Dondee it is North Northwest fiue Leagues. Dondee is a good Hauen which goeth in betwixt two high Lands, being within men doe anckor before the Towne. Farther in vpon the Riuer lyeth another Towne called S. Iohns, which you may goe vp to at high water.

Fifsnes.

Dondee.

S. Iohns.

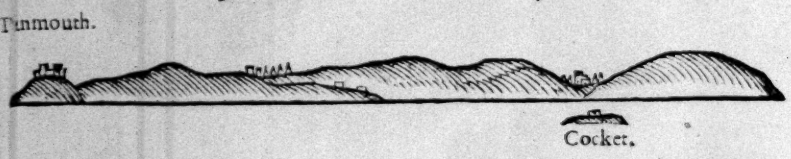
Betweene the Point of Fifsnes and Dondee lyeth also the Baye of S. Andrewes, there is all ouer good Ancker ground. Foure great Leagues North and by East from the Point of Fifsnes, and Northeast from S. Andrewes lyeth a great Rocke called the Inchcap, which the Sea flow-eth ouer at high water, and at low water it falleth so dry, that the Fishermen goe vpon it.

S Andrewes.

Inchcap.

How

Howv these Lands doe shevv themselues at Sea.



Thus sheweth the Land betwixt Tinmouth and Cocket Iland.

Of the Tydes and course of the Streames.

ON these Coasts betwixt Tinmouth and S. Abbens head a Southwest and Northeast Moone maketh high water.

At Lieth in the Hauen a Southwest and by West Moone maketh full Sea.

The Flood falleth alongst these Coasts South Southeast, and the Ebbe North Northwest.

How these Lands doe lye one from the other, and from other Lands.

FRom Tinmouth to the Cocket Iland North Northwest — 8 or 9 leagues
From Tinmouth to the Staples North and by West — — 16 leagues
From the Staples to Barwicke West Northwest 3 leagues
From Barwicke to S. Abbens head North Northwest — — 5 leagues
From the Staples to S. Abbens head Northwest 8 or 9 leagues
From S. Abbens head to the Bas West 4 leagues
From the Bas to Inchkieth West and West and by North — — 5 leagues
From S. Abbens head to the Iland May Northwest — — 4 great leagues
From S. Abbens head to Fifsnes Northwest and by North — — 5 great leagues
From Fifsnes to Dondee North Northwest 5 leagues
From Tinmouth to Schuytenes Northeast 104 leagues
From Tinmouth to the Naze Northeast and by East Eastерly — — 103 leagues
From Tinmouth to the Scaw East Northeast 136 leagues
From Tinmouth to Holy Land East and by South Eastерly — — 106 leagues
From Fifsnes to Stone Baye North and by East 16 leagues

Heights of these Lands.

TInmouth or the Riuer of Newcastle lieth in the heighth of 55 degrees
S. Abbenshead in Scotland in 56 degrees 12 minutes

CAP. VI.

The Coasts of Scotland from Dondee to the Ilands of Orckney.

SEuen Leagues to the Northwards of Dondee lyeth Monrosse, a good Hauen. Monrosse. First, you must saile in there amidst the Channell, and then edge vp to the Northwards and anckor before the Towne.

Betwixt Dondee and Monrosse lyeth an outpoint called Redhead, about a great League to the Southwards of Monrosse. There standeth a high Tower vpon the Land called Albrot. Redhead.

From Monrosse to Stone Baye or De Torre, the course is Northeast and by North foure Leagues. This is a deepe Bay and a good Hauen for those that are bound to the Southwards, where men may lye Land-lockt with many Ships. Stonebaye.

Three Leagues to the Northwards of it lyeth Aberdyn: In this Hauens mouth it is three Fathom deepe. The West point is somwhat foule, therefore you must run in by the East-Land, vntill you come within the Hauen, and anckor before the Towne in foure or fiue Fathom. Vp to the Northwards is a great Bay, but is showld on both sides. There goeth through a little Creeke towards old Aberdyn, which is an old ruinous Towne. Aberdyn.

From Aberdyn to Boockenes the course is North Northeast twelue or thirteene Leagues. Betwixt them both lyeth a tyde Hauen. Boockenes is a high Hill and lyeth vpon the South side of the Point. To the Northwards of Boockenes lyeth a Bay as a Hauen called Spy or Spilaert. From thence the Land lyeth in West and West Southwest vnto the Hauen of Rosse or Luuernes. Boockenes. Spy.

To the Northwards of Rosse lyeth an outpoint called Capo Terbate, right in the bottome of the Baye betwixt Catnes and Boockenes, distant from Boockenes about 19 or 20 Leagues. C. Terbat.

De Cuſten van Schotlandt
van Donde tot d'Eylanden van
Orcaneße

Duntſche mylen 15 in een graedt

Spaenſ. mylen 17½ in een graedt

Engelſc. en Franſ. mylen 20 in een graedt

S. Ians

Donde

Brought

Lyſt

Albrot

Rootheyſt

Monras

Northeſke

Steenbay

Steenhooft

De torre

Aberdin

Slavs

Cut

Aberdin

Fluurrie

Tethan

Buckang

C. Strathat
Roſsse
Lawernes
C. Terbatz
Dornok
I. S. Martin
Vuyste
I. Hyplant
Norne
C de Hobrunt
Dunkeith
Barriadul
Mandemmaxes
Ways
Ithoy
Denet
Finderne
Hoeck van Elgin
Cutane
Spea fluu.
Olde wyck
Nous head
Abright
Catenesse
I. Conet
Plata
Dungiske
Pitſlantſchare
Pichlantſchare
Oranaſſe
Orcades
Insulæ
Banſe
Slavs
Douern
Boekenesse
Spyloort
Boekenesse

leagues. In this baye lye manie hauens and ſounds, which are deep enough for to come into with great ſhipps. It is from thence to Catenes ſixteene leagues northeaſt and by north. Catenes lyeth from Boecknes northweſt, and northweſt and by north one & twentie or two and twentie leagues, From Boecknes unto the outermoſt Orckenes it is north and north & by weſt two and thirtie, or three and thirtie leagues.

The Orckneys are one and thirtie Ilands in number, firſt Wayets or Elhoy, which lieth next to Scotland, fiue leagues aboute the pointe. About northnortheaſt off from the point of Catenes lye two litle Ilands, Pits and Pichlantsſchare, there you may run through to the weſtwards betwixt Ilhoey and Scotland.

To the northwards of them lieth an Iland called Heynda, with an other Iland called Platta, to the northwardes of Platta lieth Mayland or Ponoma. On the north ſide of this greate Iland are all the hauens where the ſhips come to.

Upon the eaſt ſide of this great Iland lyeth an other Iland called Kabunſa, to the northwards of it lyeth an other Iland at the northeaſt point of the greate Iland, you may alſo runne through there towards Papeweſter, and leaue Sanda lye on the ſtarboard ſide.

Cloſe to Papeweſter lyeth Fara, to the ſouthwards of it is Sirza. To the eaſtwards of Sirza and Fara lye two Ilands, in the middeſt of all theſe Ilands, called Eeda and Chapnoza.

Sanda lyeth to the northwardes of all theſe Ilands, but Papa and Stronza lye to the ſouthwards of Sanda.

To the eaſtwardes of Stronſa lyeth an Iland called Cuiſtella, that is the eaſtermoſt Iland of all, the northermoſt is called Ronalze or Northernanſe.

Eleuen or twelue leagues northweſt from the great Iland lye two rocks, the one under water and the other aboue water, he that commeth from the weſtwards, muſt take heede of them.

Of the tydes, and courſe of the ſtreames.

AT Orckanes and Boeckenes a ſouthweſt and northeaſt Moone maketh high water.

The flouds come aboute from behinde Scotland from the weſtwards through betwixt Fayrhill and Orckaneſſe, and make there abouts full ſea with a ſouthweſt and northeaſt Moone.

From Boeckeneſſe the floud falleth ſouth alongſt the coaſte towards Lieth, and the ebbe north to the contrarie.

In this Farewaie it is deepe fortie, fiftie, and ſixtie fathome, in fiue and fortie, and fiftie fathome you may ſee the land. In this Farewaie in the Sommer the firſt Herrings are caught.

How theſe places doe lye one from the other, and from other lands.

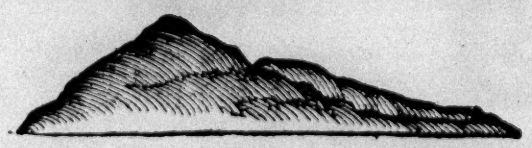
FRom Redhead to Monros northweſt — — — 4 leagues.
From Monros to Stonebay northeaſt and by north — — 4 leagues.
From Stonebay to Boeckenes northnortheaſt ſomewhat northerly — 16 leagues.
From Aberdine to Boeckenes northnortheaſt — — — 12 leagues.
From Boeckenes to Phyloort or Spyloort northnorthweſt — — 3 leagues.
From Phyloort to the pointe of Elgyn weſt — — — — 10 leagues.
From the pointe of Elgyn to the hauen of Roſſe or Luvernes weſt and by ſouth ſomewhat ſoutherlie — — 7 leagues.
From Cape de Terbate to Catenes northeaſt & by north — — 16 leagues.
From Catenes to Ilhoy weſt-north-weſt — — — 5 leagues.
From Boecknes to Catenes northweſt & northweſt and by north — 21 leagues.
From Boecknes to the Orckaneys north and by weſt — — — 26 leagues.
From Boeckenes to Hanglip, or the ſouth ende of Hitland north and by eaſt 53 leagues.
From Boeckenes to Schuytenes eaſt and by north — — — 69 leagues.
From Boecknes to the Naze eaſt ſomewhat ſoutherly — — 88 or 90 leagues.
From Boecknes to Boevenberghen in Iutland eaſt and by ſouth — 104 leagues.
From Boecknes to Holy land ſoutheaſt and by eaſt eaſterlie — — 123 leagues.
From Boeckenes to the Teſſell ſoutheaſt ſoutherly — — — 125 leagues.
From Boecknes to the Holmes before Yarmouth ſouth-ſouth-eaſt, ſomewhat eaſterlie — — — 98 leagues.
From Aberdyne to the Holmes before Yarmouth ſoutheaſt and by ſouth 93 leagues.

Heights of theſe lands.

BOeckenes lyeth in the heigth of 57 degrees 50 minutes.
Catenes in 58 degrees 32 minutes.
The greateſt or the outermoſt Iland of the Orckneys in 59 degrees 8 minutes.

How these lands doe shew themselues at sea.

Thus sheweth Boeckenes when you saile along by it.



In this forme sheweth the land of Catenes, when you saile alongst by it.

Thus sheweth the northeast point of Orckenes when you saile alongst by it.

Thus sheweth the land of Scotland to the northwards of Aberdyne, when you saile alongst by it two leagues from the land.

CHAPT.

CHAP. VII.

The Coasts of Fairehil, Hitland, and the Ilands lying aboute them.

THE Iland Fairhill lyeth frō the east point of the Orcaneys northeast,& from Boeckenesse north and by west about seuen &thirtie leagues. On the west side of Fairehill is at some places foule ground, but upon the southeast side is good anker grounde, there you may ancker everie where.

Fairhill.

Fulo lyeth from Fairehill northwest and by north ten leagues, betwixt them both lieth the southermost point of Hitland, lying from Fairehill northnortheast seuen or eight leagues, and from Fulo east and by south foure leagues.

The southwest coaste of Hitland, (to wete from the southermost pointe to the northwest point) lieth northwest and by north 7 or 8 leag. On the same southwest side, over against the Iland Fulo lieth a Sandbay, where men may ancker, but on the east side of this Bay it is somewhat foule. From that northwest or west point off to the north ende, the land of Hitland lyeth northeast and southwest seuenteene or eighteen leagues.

Two leagues to the northwards of the foresaid west point lieth the hauen of S. Magnus, which is a broade Sound, within it is good ancker ground in sixteene or seuenteene fathom depth, according as you shall be farre within the land. On the north side lyeth a high rock, where you must runne in to the southwards of. And on the south side lie two or three rocks, which you must leaue on the starboard side, when you will saile in there.

S. Magnus.

Euen to the eastwards about the south point of Hitland, lieth a faire sand bay, where you may ancker in twelue or thirteene fathome, from thence to Hanglip the course is northeast somewhat easterlie nine or ten leagues.

Hanglip.

Betwixt Hanglip and the south point lieth an Iland, which you may sail about on both sides, within it lyeth Hambrough hauen, or the Scottish hauen, which is a lade place for the Hamburgers and Scotts. This hauen is also called Bremer hauen. There lieth also a high steep point to the southwardes of Hanglipp, to the southwardes of it men doe runne into Broadsounde, the chiefest hauen of all Hitland, which is deepe and hath cleane ground, there men doe lie landlockt for all windes.

Hambrough hauen.

Broadsound.

From the Broade sound lieth a Sound in alongst to the northwardes, through the land, which cometh out again into the Sound to the northwards, & so maketh an Iland of the land, whereupon the high hill Hanglip lieth. When as you will saile in there from the northwards, that is to the northwards of Hanglip, you must runne in neareſt by the south shoare, and edge to it betimes. In this channel betwixt both lands lie two Ilands or rocks, the greatest lieth neareſt the north shoare, and the smallest neareſt the south shoare, betwixte them both lieth also a suncken rock, which at low water is uncovered, and at high water you may know it by the breaking upon it. When as you will saile in here, you must leaue the foresaide greateſt rock, with the suncken rock, on the starboard side, and the smalleſt rock on the larboard side, there is upon the showldest three fathome and a half water.

Within this hauen lie also two hauens at the north pointe, which lie into the land, where is good lying.

When as you will saile from this foresaid hauen through within unto the Broad sound, you shall meete, scarce halfe waies with a rock, from which lieth off a riffe towardes the west shoare, thwarte of it you must run close alongst by the west shoare, for to avoide that riffe.

To the northwards of Hanglip, the land of Hitland lieth north, north and by east,& northnortheast, at last north, and at some places you may saile in through Hitland, especially to the northwardes of Hanglip, where a faire broade Sound lieth northwest through, there is good ancker ground to finde at some places, for those that are there acquainted. From Hanglip to the northeast pointe of Hitland, the course is northnortheast ten leagues, there lye some outrockes called the Outschares. From thence alongst to to the north point of Hitland, the course is north aboute four leagues.

Outschares.

A litle about the east point goeth in a fair haven, called Bloem sound, lying in s.w. On the west side lieth a long rock, you must saile in to the eastwards of it, and ancker a litle within the hauen, it is there within al clean sand ground, & good lying. Bloemsound lieth in first (as hath been said) s.s.w. afterwards south,& south & by east, on both sides is good ancker ground, there you may sail altogether through, and come out againe through Ielleſound into sea, aboute the Iland Fetlo.

Bloem sound

Of the tides and course of the streames.

IN Hitland within the hauens and Sounds a s.s.w. and n.n.e. moone maketh ful sea. The floud runeth there to the eastwardes and the ebb to the westwards, especially at the south end and north end of Hitland, and so fall thwarte through the Sounds and hauens.

How theſe lands doe lye one from the other, and from other lands.

FRom Fairehill to the northeaſt point of Orcaneys ſouthweſt 9 or 10 leagues.
From Fairehill to the ſouth ende of Hitland ſouthſouthweſt, and ſouth and by weſt — — — 7 or 8 leagues.
From the ſouth ende of Hitland to the Iland Rona weſtſouthweſt — 46 leagues.
From the north end of Hitland to the rocks of Rocol weſtſouthweſt 127 or 128 leagues.
From the ſouth ende of Hitland to Fero weſtnorthweſt, and northweſt & by weſt 61 leag.
From the north ende of Hitland to the ſouth ende of Fero weſt, and weſt and by north — — — — 58 leagues.
From Hitland to the eaſt pointe of Iſland the courſe is northweſt and by weſt about 130 l.
From the north end of Hitland to Gryp northeaſt and by eaſt — 125 leagues.
From Hitland to Sradt e.n.e. 69 leagues.

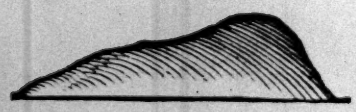
Heigths of theſe lands.

THe ſouth ende of Hitland lyeth in 59 degrees 48 minutes.
The north ende of Hitland lieth in 60 degrees 45 minutes.

How theſe lands doe ſhew themſelues at ſea.

When Fairehil is weſt and by ſouth three or four leagues from you, it ſheweth thus.

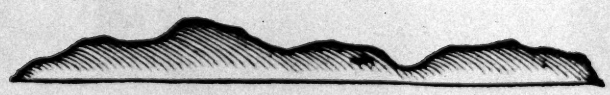
When Fairehill is ſoutheaſt, and ſoutheaſt and by eaſt three or four leagues from you, it ſheweth thus.



Fairehill being fiue leagues ſouthweſt and by weſt from you ſheweth thus.

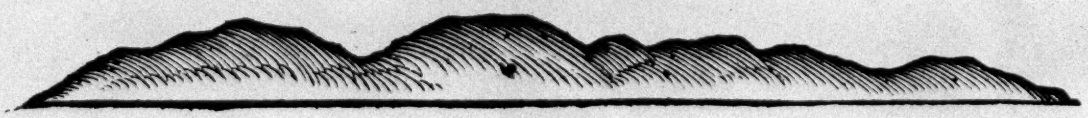
When Fulo is northweſt from you ſo far, that you may euen ſee it out of the top, it ſheweth thus.

When Fulo lyeth northnortheaſt foure leagues from you it ſheweth thus.

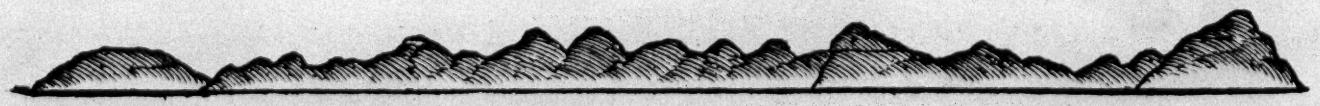


When Fulo lieth fiue leagues eaſtnortheaſt from you it ſheweth thus.

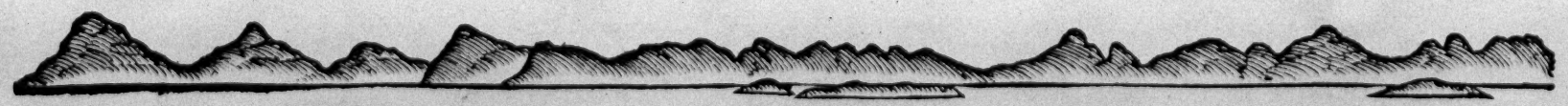
Thus ſheweth Hitland, when it lyeth northweſt and by weſt aboute foure leagues from you.



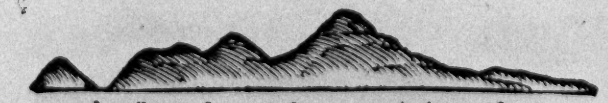
Bremer hauen. Pointe of Broad ſound. Hanglip.



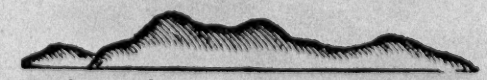
In this forme ſheweth Hitland, betwixt Hanglip and Hamburgher hauen.



Fiue leagues to the northwards of Hanglip the land ſheweth thus, being aboute a league off from it, Hitland lieth in there with a greate bight, with manie Ilands.



Thus ſheweth Hanglip, when it is northweſt from you eight leagues.



When as the north ende of Hitland is ſoutheaſt and by eaſt from you, then it riſeth thus.

CHAPT. VIII.

Of the Ilands of Fero, or Farre.

Names of the Ilands of Fero.

THE greateſt and chiefeſt Ilands of Fero are twelue in number, as Suydro, Sando, Moggenes, Wage, Stromo, Oſtro, Calſo, Cuno, Bordo, Wydro, Swyno, and Fulo.

The litle Ilands of Fero are tenn, as Litle Dymen, Stoerdymen, Schuyvo, Dalsfles, Heſten, Trallo Colſter, Moggeneſholme, the Monck, and the Biſhop. Beſides theſe there are yet ſome rocks and litle Ilands, to ſeuen or eight in number.

Suydro. The ſouthermoſt greate Iland called Suydro lieth moſt ſoutheaſt and northweſt, about ſeuen or eight leagues.

Monck. Somby. At the ſoutheaſt ende of this Iland lieth a high rock, called the Monck, or Sombie, after the name of the firſt or ſouthermoſt hauen in Suydro. Betwixt the Monck and the ſoutheaſt ende of the Iland Suydro, is a race or Well, which men muſt avoide, eſpecially with ſpring tides.

Upon the weſt ſide of the Iland Suydro are no hauens for to ſaue anie ſhippes in, but it is altogether high ſteepe land. On the north ſide are manie hauens, where men may ſaile into & ſaue ſhips, as Sommerſound or Heſt, Hofwyke, Vrobie, Quaelbie or Rane, all broad Sounds or hauens: a countrie man or Pilot can bring you in there everie where, to your deſire.

Moggeneſholm. From the northweſt end of Suydro to Moggeneſholme, the weſtermoſt & outermoſt Iland of Fero, the courſe is northweſt and by north, & n.n.w. about eight or nine leagues.

Moggenes-waghe. At the eaſt ende of Moggheneſholme lyeth Moggenes, to the eaſtwards of it lieth the Iland Wage, and to the eaſtwards of Wage goeth in a faire Sound from the ſouthwards, off from the Iland Sando about Heſten & the Iland Colſter, for you may run in aboute theſe Ilands on both ſides, and leaue the greate Iland Stromo on the eaſt ſide, and ſo come into Waghe. In the middeſt of the Sound of Waghe, goeth up a hauen to the eaſtwards into the greate Iland Stromo, therein you may anker in ten or twelue fathom, but the Sound is at leaſt twentie fathom deep.

Moggenes and the northeaſt ende of Fero lie eaſtnortheaſt, or a litle more northerlie, & weſtſouthweſt about fifteene leagues aſunder. Betwixt them both lie tenne Ilands, and betwixte each Iland, is a faire broade and deepe Sound, whereof the fourth off from Moggenes is called Somſound. Somſound. All theſe Sounds lie moſt n.n.w. and ſouthſoutheaſt through the land, and upon all theſe Ilands ſtand Churches, except upon Oſtra, which never the leſſe is a great Iland.

From the ſoutheaſt end of Suydro to Schalhead, or the ſoutheaſt ende of the Iland Sando the courſe is north and by weſt about 5 leagues. Schalhead.

Betwixt Suydro and Sando lye the litle Ilands, Litle Dymen, Stoer Dymen, Schavo and Dalsfles. Litle Dymen. Stoerdymen.

From Schalhead until within the Iland Mulſo (lying before Stromo) the courſe north and by weſt 4 leagues, there you may everie where ancker, where you wil in twentie, thirtie or fortie fathome. If any man comming in out of the ſea, deſireth to ſeeke a good road or hauen under the Ilands of Fero, he ſhall keepe that middlemoſt great Iland Stromo northweſt and northweſt and by weſt from him, and then he ſhall ſee upon the middeſt of the Iland Stromo a high ſteepe hill called Schellinck, which he muſt ſaile right in with, and ſo he ſhall meete with that foreſaid Iland Mulſo, a low Iland, which you may ſaile aboute on both ſides, but it is beſt for to runne in there at the ſouth end, under this Iland is all over good ancker ground. Right over againſt this Iland, on the great Iland, lyeth Torſhauen, the chiefeſt hauen of Fero, where all the trade of merchandize is. Stromo. Schelling. Torshauen.

From Torſhauen or the Iland Mulſo to the northeaſt end of Fero the courſe is northeaſt, & northeaſt and by eaſt aboute twelue or thirteene leagues, betwixt them both lie ſeuen Ilands, and betvvixt each Iland (as hath been ſaid) goeth a broad Sound through the land, lying through about northweſt, northweſt and by north, and northnorthweſt. The north end of Fero is about four leagues broad, and lieth northweſt and ſoutheaſt, and is called Fulo, thwart of it lyeth the Biſhop. Fulo. The Bishop.

He that deſireth to ſaile off from Mulſo into Somſound, let him go on northeaſt & by north three leagues, unto the point of Bordenes, then up northweſt off from Bordenes, & then he ſhall eſpie a church upon the Iland Calſo, which he muſt leaue on the ſtarboard ſide, and goe in alongſt weſtnorthweſt, untill he come into the Bight of the Iland Oſtro, and ancker there in ſeuenteene or eighteene fathome.

Theſe Ilands of Fero lie in a triangle, it is from the ſoutheaſt ende of Suydro to Fulo, or the north ende of Fero northnortheaſt and ſouthſouthweſt 21 leagues aſunder.

Of the tides and courſe of the ſtreames.

IN the Ilands of Fero a north and ſouth moone maketh the higheſt water.

Underſe the Ilands of Fero go verie harde tides, with greate turnings, the floud commeth there out of the weſt and weſtnorthweſt, & the ebbe out of the eaſt, and eaſtſoutheaſt, and fall ſo alongſt through the Ilands, there you muſt reckon

Eijgentlycke afbeeldinghe vande Eÿlanden Hitlandt anders Scotlandt, Fulo, en Faÿerhil naerhare reechte gelegenthent ontworpen.

Vive pourtra… ture des Isle… Hitlande au… ment dict … lande, Fulo e… ril, selon leu… vraye situation

Foele
Fulo

Feril

Schauwey

S Magni
hoort

De Suydtbocck

Suÿnborgerhooft

S Magni

Schotsche Ree
Hamburgerhaven ofte
Bremerhaven

Hetland anders Hitland

Bressont

Hanglip

IELLO

IELLO

Iellesandt

Fetlo

OLSTO

Wyckbreen

Duytsche mylen 15 in een graad. Lieues dAllemaigne 15 en un degre

Spaensche mylen 17½ in een graad. Lieues dEspaigne 17½ en un degre

Engelsch en Francoysche mylen 20 in een graad. Lieues Angloyse et Francoyse 20 en un degre

ve pourtraic
e des Isles
tlande autre
nt dict Schet
de, Fulo et Fe
selon leurs
nes situations

LLO

Bleemesondt

TO

38

1 2 3 4 5 6

Duytsche mylen 15 in een graed Lieues d'Allemaigne 15 en un degre

1 2 3 4 5 6 7

Spaensche mylen 17½ voor een graad Lieues d'Espaigne 17½ en un degre

1 2 3 4 5 6 7 8

Fransche en Engelsche mylen 20 in een graed. Lieues Françoises et Angloises 20 en un degre

Carte marine des Isles de Fero ou Farre, montrant au vif la situation merveilleuse et entrerompue desdictes Isles, et tout ce qu'il y a en les navigeant a eviter

FERO

Meggenesholm

MUGGENES

Surwage

Middel wage

WAGE

Sarwage

Colster

Trollo

Hesten

Westerhūs

Lemen

Dalsmyen

Schellins

Calbac

STROMO

Sandwick

Celsfoort

Grewe

Qualwick

Saxsen

Wilcernes

Qualby

Freyberg

Samy

Todence

Quames

Schauio

Saltuoort

Sizerdimen

SANDO

Schalwick

Quacknes

Littel dimen

Dalsgles

Schalhoort

SUDRO

Hoff

De Monnick

Sambuy

Sumbuy eris

Ostrumes

OSTRO

Rutewick

Laulsate

Sumburne

CALSO

CUNNO

Mitrio

Bordewijck

Amsgarde

BORDO

Wide

WID

Foele
Fulo

Eygentlycke afbeeldinghe vande Eÿlanden Hitlandt anders Scotlandt, Fulo, en Faÿerhil naerhare rechte gelegenthÿt ontworpen.

Vive pourtraicture des Isles Hitlande autrement dict Schetlande, Fulo et Feril, selon leurs vraies situations

Schawey
S. Magni
De Suydtboeck
S. Magni
Suÿnborgerhooft
Schotsche Ree
Hamburger haven ofte Bremerhaven
Hanglip
Breefont
Schetland anders Hitland
IELLO
IELLO
OLSTO
Ielleſandt
Bleemeſandt
Fetlo
Noſchören

Duytſche mylen 15 in een graet
Spaenſche mylen 17½ voor een gr
Fransche en Engelſche mylen 20 in een

De Monnick
Sumbÿ
Sumbÿ eyls
SUDRO
Hoorn
Hoorn

Carte marin
des Isles de F
ro ou Farre, m
trant au vif l
tuation merveill
et entrecompue
ductes Isles et
ce qu'il y a
les navigeant
a eviter

FERO

Mloggeneshoim

MUGGENES

Suriwage

Middel wage

WAGE

Santwage

Colster

Trollo

Wilernes

Heften

Schauio

Saltheoft

Stoerdimen

SANDO

Schalloor

Quitelnes

Saint

Littel dimen

Dalsples

Schalhoeft

SUDRO

Presbery

Quaby

Samir

Todenes

Quanes

Hoeck haue

Hoeck Haue

Texe Hoeft

Lemen

Dalsimpen

Noordtdf

Midde

Wimā

Schelling

Calbac

STROMO

Westerbūe

Forderbuyck

De hoge Tuna

Sumes

Coltfoort

Greve

Qualwijck

Saxsen

Mirio

Lerwick

Suid foort

OSTRO

Rutewic

Lauluic

Sandewaic

Sumyms

CALSO

CUNNO

In dese Voorr comen veel Walvisschen

Bordewijck

White

Hwssawide

BORDO

WIDRO

SWINO

FULO

De Bisschop Farre

Passaarte van de Eylanden van Fero ofte Farre, vertoonende naer leven de wonderlycke gebreecken hebt ende gestalte der selver, en waermen uit besenten van dien aldaer te schouwē heeft.

te marine
sles de Fe
Farre, mon
au vif la si
merveilleuse
rerompue des
Isles et tout
il y a en
avigeant
eviter

30

Læus

S. Patricius

Sancta Maria

S. Petrus

S. Kilda

Pascaarte verthoonende in wat gheſtalte de Eylanden Hebrides ghenaemt achter de noordweſthoeck van Schotlandt gheleghen zyn.

Carte marine de les Isles Hebrides situez vers noroueſt arriere l'Escoſſe

reckon your tides thereafter, when you vvil sail from the one Iland to the other, there are tvvo vvels or Maelstreames, the one at the south end of Suydro, and the other a league vvithin Schalhead at Quaelnes.

Although the tides do run so strong through these Ilands, yet nevertheles it floweth not there four foot up and dovvne.

How these lands doe lie one from the other, & from other lands.

FRom Fero to Rona the course is south & by east — — — 45 or 46 leagues.
From the south end of Fero to Rokol southwest westerlie — — — 85 leagues.

Heights of these Lands.

THE south end of Fero lyeth in 61 degrees 15 minutes.
The north ende in 62 degrees 20 minutes.

CHAPT. IX.

A Description of some Ilands behinde the north vvest pointe of Scotland.

FRom Scotland westwards & to the northwards of Ireland, lie manie Ilands, where of we shall here describe some, with so much perfectnes, as thereof is yet knowne.

Names of the Ilands.

The names of the principall Ilands lying there are these: Areu, Ila, Iona, Mulla, Bragedull, Hun, Iust, Lewis, S. Patricius, S. Maria, S. Colane, S. Petous, Epth, and S. Kilda, these are the greatest. There are yet some small Ilands: as Rona, Cheut, Trauta, Fladde, Grand Melul, Petit Melul, Stalpan, Cannay, Rum, Egghe, Mule, Cutte, Carndenbrough, Gronsay, S. Karbo, Lismont Swynoy, Machare, Gegay, Caray, and Naversay. All these Ilands doe lie and belong under Scotland, and are those which by the Cosmographers are called *Insulæ Hebrides*.

Barre or Rona.

The Iland Barre or Rona is the northermost Iland lying behinde Scotland, & lieth from Fulo about westsouthwest seuen & thirtie, or eight & thirtie leagues, it lieth by two other litle Ilands aboute a greate league one from the other.

The Ilands of Lewis lie from Rona southwest distant sixteen or seuenteene leagues, and from the north ende of Lewis to S. Kilda it is southwest and by west sixteene leagues.

On the east side of S. Kilda is a good roade for a west and northwest winde. This Iland lieth by the other little Ilands, whereof the two are not verie great, upon that which lieth to the westwardes you may see some houses stand, & these two litle Ilands lie ten leagues to the westwards of the greate Iland of Lewis. Vpon the coast of Lewis lie also two rowes of great rocks, like as if they were little Ilands, lying one from the other south and nórth somewhat easterlie about seuen or eight leagues.

The southermost lye by three litle Ilands, but the northermost lye by eight smal litle Ilands or rocks.

The Iland of Lewis is devided into manie parts, the which men may sail through at manie & divers places. Lewis with the Ilands belonging to it lie southsouthwest, and south and by west about nine and twentie leagues.

But on the east side goeth a broade Sounde through of siue or sixe leagues. Men sail in close by the Iland of Lewis, aboute southsouthwest, untill past the Iland Cheut.

Frō thence the Sound lieth through betwixt the great Iland Bragadull and Lewis south, and south and by west towardes the west ende of Lewis, called the Ephts, then you must leaue Mulla and Ila, with divers manie other Ilands on the larboard side.

Iona, Ila, Mulla and Bragedul are feure of the greatest Ilands, which are lying on the west coast of Scotland, & lye close by the main land, but there are manie hauens and Sounds, so that there you may saile in and aboute them everie where.

At the northwest pointe of Ireland lie also some Ilands, which you may saile through and round aboute them all.

Betwixt Rona and Orkneys lye also some Ilands, which also you may sail through betwixt and round about.

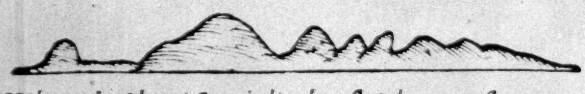
He that falleth with these Ilands must be verie careful & circumspect, for the most part of them are inhabited by wilde and savage people.

In Lewis and the Ilands thereabouts a southwest and northeast moone maketh the highest water, & likewise also without the north pointe of Scotland

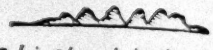
How

Hovv theſe Flands doe shevv themſelues at ſea.

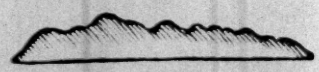
When S. Kilduyn is ſ.w. about 5 leagues from you it ſheweth thus.



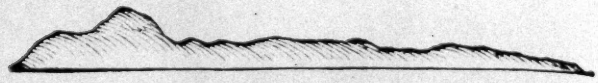
When the Iland Lewis lieth eaſt 8 leagues from you then it riſeth thus, and then you are nigh-hin S. Kilda.



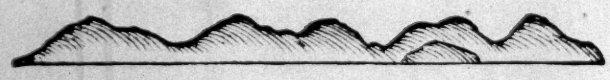
This Iland lieth alſo upon the coaſt of Lewis



Thus ſheweth the Iland Barro or Rona, when it is foure leagues ſ.ſ.e. from you



This Iland lieth weſtſouthweſt from Scotland.



This land lyeth on the northweſt point of Scotland towards Locherme.

How theſe Ilands are lying one from the other, and from other lands.

FRom Rona to Lewis the courſe is ſouthweſt — — 16 leagues.
From the north ende of Lewis to S. Kilda ſouthweſt — — 16 leagues.
From the ſouth end of Lewis to the northweſt point of Ireland the courſe is ſouthſouthweſt about — — 27 leagues.
From S. Kilda to the north ende of Hitland northeaſt and by eaſt — 93 leagues.

Heights of theſe lands.

THe Ilands of Rona lye in 58 degrees 46 minutes.
The north ende of Lewis lyeth in 58 degrees 18 minutes.
The rock Rokol lieth in 58 degrees 20 minutes.
The northweſt point of Scotland lieth in 58 degrees 30 minutes.

The ende of the fourth Booke.

To the Bookbinder.

Place the Cardes thus.

Numb.	31, & 32,	before fol.	103.
	33, —	—	109.
	34, —	—	113.
	35, —	—	115.
	36, —	—	119.
	37, —	—	121.
	38, —	—	123.
	39, —	—	126.
	40, —	—	127.

THE

The second parts

FIFTH BOOKE

of the

SEA-MIRROVR

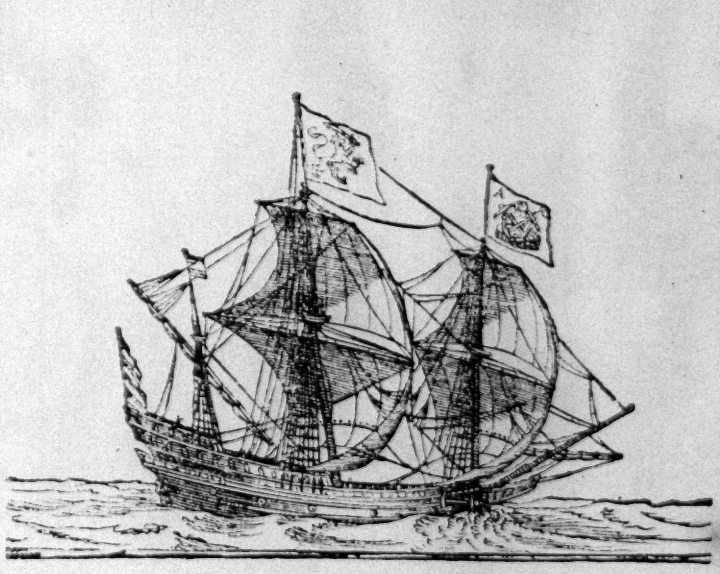
of the Easterne and Northerne

NAVIGATION.

Containing

THE DESCRIPTION OF THE Seacoastes of Norway.

From Der Neus to the North Cape, and
of the new found land of Spitsbergen.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.

Ystant

Duytſche mylen 15 in een Graadt

Spaanſche mylen 17½ in een Graadt

Engelſche en Franſche mylen 20 in een Graadt

Fero

Diamand

Barro

Schotlant

Fule

Hitlant

Faerhill

Stadt

Bergen

Stavanger

N O O R

Ian Mayen Eylant

WEGEN

t'Beren Eylant

Noort Caep

Ysland

15 m̃ aen Graadt

17½ m̃ aen Graadt

mylen 20 m̃ aen Graadt

Ian Mayen Eylant

Hitland

NOORWEGEN

Stadt
Ytin
Elde
Skie Soet
Vaerrefiort
Sturi fiort
Ielsefiort
Sandwyck
Bergen
Kuiken
Lederen
Stavanger
Sulmar
Lister
Romsdal
Berghout
Buckt
Smeerholm
Drontz
Torrwyck
Lofoot
Wagsal
Anuens
Senien
Stein
Trondhout
Ostrogfiord
Leudgia
Werdhuy
Rellen
Meffort
Rohol
Wigsand
Anunes
Salmar
Samar
Tronfiahl
Marstrandt
Iuffe
Sueroy
Iman
Ingen
Staps
Schelmsbuy
Carl
Noort
Ostrogfiord
Trondgh
Steech
Salten
Tosnerfiorder
Lorantzeh
Argyves
Arhve haven
Torrwyck
Fosdrick
Rust
Wera
Mosfkenw
Lofsoot
Wagsal
Anuens
Senien
Stein
Trondhout
Iman
Sueroy
Ingen
Staps
Rust
Leudgia
Werdhuy
Rellen
Meffort
Rohol
Wigsand
Anunes
Salmar
Samar
Tronfiahl
Marstrandt
Iuffe
Schelmsbuy
Carl
Noort
Ostrogfiord
Trondgh
Steech
Salten
Tosnerfiorder
Lorantzeh
Argyves
Arhve haven
Torrwyck

70 78 79 80 81 82 83 84 85 86 87

Spitsberge

Wybe Iansz water

Staaten Eylant

Noort Caep

Swarten hoeck

Hoop Eylandt

Pascaarte vande West custe van Noorwegen en Spitsberge.

t' Amsterdam, By Willem Janszoon inde Zonnewijser.

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De
Zeecuſten van
Noorwegen
tuſſchen
Der Neus en
Schuteneß

Omhon
Kaarsfiord
Suernerot
Finlek
Stafanger
Diefholm
Doefwijck
Longenes
Rock foort
Skidsfiord
Cleine Bock
Sibrichsteen
Bock
Copernick
't Lieder
Schuteneß
Wittinos Hoogh
Veetsteen
Ruit
Vstia
DE
IED

Duytſche mylen 15 voor een graadt

1 2 3 4 5 6 7 8

Engelſche en Franſche mylen 20 in een graadt

1 2 3 4 5 6 7 8 9 10

NOORWEGEN

Koe Kalf

Nieu Silloe

Der Neus

Melsin

Out Silloe

Bisschops hoeden

Bergh Sondt

Winsboerd

't Landt van Leest

Sterowaich

Ekesondt

Soggendal

Hitterve

Focsteenen

42

Siloe.

Old Silloe.

The land of Leeff.

Hinnoroe.

THE FIFTH BOOK

of the

EASTERNE AND NORTHERN NAVIGATION.

Conteyning the Deſcription of the Coaſts of Norvvay from the Naze to the North Cape, and alſo of the New found land Spitsberghen.

CHAP. I.

The Deſcription of the coaſts of Norvvay from the Naze to Scuytenes.

ALitle to the weſtwardes of the point of the Naze lye two havens, New and Old Silloe, or Silleu; ſome doe cal theſe one haven (like as alſo men may doe) and diſtinguiſh it with an eaſter & weſter gat or haven, for men can goe with boats through within the rockes from the one into the other, but not with gteat ſhips.

Silloe. For to ſaile into the Eaſtger gat, or New Silloe, you muſt take heede of the Biſhops Boeden, which are a few out-rocks a little to weſtwards of the point of the Naze, right before the middeſt of the ſound, leaue them on the larbord ſide, and ſaile in alongſt by the land of the Naze, untill you come ſomewhat within the foreſaid Biſhops Boeden, & then you ſhall finde there alſo a ſunken rock, which you muſt avoid, run about to the northwards of it, and edge then up to the weſtwardes behinde the Iland of New Silloe, and ancker there againſt the white church within the fore-ſaid rock.

Old Silloe. For to ſaile into the Weſter-gat, or Old Silloe, you muſt run about to the weſtwards of the out-rocks and Biſhops-boeden, and ſaile right with the ſouth end of the land of Leeſt; being come by it, run to the eaſtwards alongſt by it, but take heed of ſome rocks, which lye off from the innermoſt Iland on the ſtarbord ſide; being there within, ancker againſt the Iland, where you pleaſe.

The land of Leeſt.

Hitteroe. From the Naze to the Iland Hitteroe, or Hittereu, the coaſt lyeth alongſt the the land of Leeſt weſtnorthweſt fiue leagues. To the ſouthwards or the weſtwards of that Iland men doe ſaile into the haven of Winfoord, which lyeth in northeaſt, but to the northwards of it men doe run into Bergſound, eaſtnortheaſt in betwixt the Iland and the land. Winford. Bergſound.

In that Iland is alſo a good haven, which you muſt ſaile into from the northwards, the havens mouth is not very wide, when you are come in within it, you may edge up to the eaſtwards or ſouthwards, and anker.

Two leagues to the northward of Hitteroe lyeth a haven called Sogghendall, there lyeth a little Iland before it, within men may ancker, it is a good road for them which are bound to the ſouthwards. Betwixt them both not farre without the land, lye two out-rocks alongſt the ſhore, called the Fock-ſtones, the one lyeth a litle more to the ſeawards then the other. Soggendall

A league to the northwards of Sogghendall lyeth Ekeſound, before it lyeth an Iland, which you may ſaile into on both ſides of it, the ſouthergat lieth in northeaſt; being come in there, you muſt anker on the north ſide of the haven in a bay, there is the beſt road in 8 or 9 fathom, the norther gat lyeth in to the eaſtwards; being come in there, you may anker at divers places. A league to the northwards of Ekeſonnd lyeth a haven called Sierowach. For to ſaile in there coming from the northwards; you muſt run in right with the ſouthermoſt ſand-bay, untill you come cloſe by the ſhore, and then the haven doth open it ſelfe, loof up cloſe alongſt by the eaſt ſide, untill you come by the north ſhore, then run up by it to the ſouthwards, & avoid the weſt point, thwart of it lyeth a ſuncken rock 12 foot under water; being there within, let your anker fall in 7 or 8 fathom, and bring a cable on the weſt ſhore, there you ſhall lye Ekeſound. Sierowach.

landlockt for all windes. This is a good haven for thoſe which are bound to the northwards.

Walbert. Mids Iedder. To the northwards of Sierowach lyeth the land the Iedder, which lyeth from Sierowach firſt northweſt & by north two great leagues to the point Walbert, or Mids Iedder, & then north 4 leagues, which is altogether a cleane whole coaſt, without any dangers, or havens, except at the very north end, from which runneth off a litle riff northweſt into ſea, towards the Veetſtone.

Veetſtone. The Veetſtone is a great rock lying about two leagues without the land, lying n. n. w. from Mids Iedder 5 leagues, betwixt them both a great league to the ſouthwards of the Veetſtone, lye ſome low black rockes called Rut. When as you ſaile from Mids Iedder on n.n.w. towards the Veetſtone, then the Veetſtone doth ſhew himſelfe very round, like a hay-cock, and ſailing ſo, you might lightly fall with the foreſaid rocks of Rut; but being a litle more to ſeawards, the Veetſtone ſheweth it ſelfe a litle longer on the weſt ſide, then you cannot take hurt of the rocks of Rut.

Rut.

Whitings eye. Sibrichſtone. About two leagues n n.w. from the Veetſtone lyeth an Iland, whereupon ſtandeth a church called VVhitings-eye, but n.n.e. from the Veetſtone 4 leagues, lieth another Iland before the Sound of Stavanger called Sibricſtone.

If you will ſaile into Stavanger comming from the ſouthwards, then ſaile through betwixt the Veetſtone and the maine land, leaving alſo the foreſaid rocks of Rut lying on the ſtarboard ſide, but you muſt take very good heed of that litle ſtone-riff which lyeth off from the north end of the Iedder; ſaile in ſo untill that the Veetſtone doe lye ſouthweſt from you, then goe in northeaſt towards the point of Tongenes, which is a long point and low land on the ſouth ſide of the Sound.

Tongenes. VVhen as you ſaile now from the Veetſtone towards Tongenes, then you ſhall ſee that Iland Sibrichſtone before the Sound, which doth ſhew it ſelf in two parts, leaue that on the larboard ſide, and ſaile in by the point of Tongenes, but there lyeth a rock off to the northwards from the point: ſaile through betwixt the rock and the point, about eaſt, or e.ſ.e. into Doeſwyke; when you are within the caſtle of Doeſwyke, there you may anker.

Doeſwyke.

Stavanger. But if you will ſaile in further before the town of Stavanger, then leaue the Diet-holme on the ſtarboard ſide, and ſaile in ſoutheaſt, and ſouthſoutheaſt before the towne, and ancker there where you pleaſe.

But when as you come from the northwards, and will ſaile to Stavanger, then run through betwixt the Veetſtone & the VVhitings eye, and then goe on northeaſt towards Sibrichſtone, and the point of Tongenes, and doe further as hath been before taught.

From the Veetſtone to Schuytenes the courſe is northnorthweſt 5 leagues: but from Schuytenes to Sybrichſtone through betwixt VVhitings-eye, the courſe is eaſt 5 leagues. Schytenes.

Foure leagues weſt, and weſt and by north to ſea-wards from Schuytenes lye the Rocks called the Outſeers. Outſeers.

Of the tides and courſe of the ſtreames.

ON theſe coaſts of Norway off from the Naze, untill paſt Berghen unto Stade, the water riſeth and falleth, but keepeth no certaine tyde: but from thence towards Dronten, and to the northwards of it, it keepeth tyde according to the moone, lyke as in other places.

How theſe places doe lye one from the other, and from other places.

FRom the Naze to Hitteroe the courſe is
weſtnorthweſt 5 leagues
From Hittero to Ekeſound the courſe northweſt 4 leagues
From Ekeſound to Sierowach northweſt and by north 2 leagues
From Sierowach to Mids-Iedder, northweſt and by north 2 leagues
From Mids Iedder to Rut the courſe is northnorthweſt 4 leagues
From Rut to the Vetſtone north and by weſt a league and a halfe.
From the Veetſtone to Sibrichſtone northnortheaſt 4 leagues
From the Veetſtone to Schuytenes northnorthweſt 5 leagues
From Sibrichſtone to Schuytenes through within VVhitings eye weſt 5 leagues
From the Naze to the Outſeers the courſe is northweſt 29 leagues

How moſt of all the places on the north ſea do lye from the Naze both in courſes and diſtances of leagues, is deſcribed in the firſt chapter of the ſecond Book.

Of the heights of theſe lands.

ACcording to the record of the Real-cards, the point of the Naze ſhould lye in the height of — 57 degrees 40 minutes. The Iland Schuytenes in 59 degrees.

Het Noorder Deel van Bremerholm tot Bergen

Bergen
Slot
Duytsholm
Ton
Hornes
Haerlesfioerd
Yslandt
Schuyt haven
Lemmes haven
Werckenes
Lethoorns
Reesteen
Ieltesfioerd
Ieltesheer
Kaerwijck
Groot alesfioerd
Het groote Eylandt.
Clein Alesfioerd
St. Olofs holm
Vaetmes steen
't Landt van Bock op ra
t Bock op ra
Cruysnes
Cruys fioerd
Kruysbanck

1 2 3 4
Duytsche mijlen 15. in een Graadt
1 2 3 4
Spaansche mijlen 17½ in een Graadt
1 2 3 4 5
Engh en Franss mijlen 20 in een Graadt

De Bommel
Olde Liet
Bremer Aesholm
Nieuwe Liet
Volger ree
Huis
Oocklee
De Bom mel
Beulshaven
Munsterhaven
't Landt van Bommel hooft.
Syck
Bommel haven
Bommelhuis

Het Liet van Bergen
begrepen in twee stucken

Ingesondt
Olde Liedt
Diepesondt
Roetholm
Rootholm
Nieuwe Liedt
Bremerdiepholm
Roomknaap
Stroomsondt
Solmer fleerd
't Landt van Bommelhooft.
Engesondt

Het Zuyder Deel
van Schuilenes tot Bremerholm

Die Beck
Beck-schanse
Sluchter
Copervangel
Copervanck
nes
Suchstroom
Netu
Schui
te
Klip
Wtfiers

CHAP. II.

How men shall saile vp into the Liet of Berghen.

THE Liet of Berghen goeth in betwixt the Iland Schuyteneſſe and Bock. Scuyteneſſe is about foure leagues long, at the ſouth end ly ſome ſunken rocks and fowle grounds; for to avoid them comming in out of the ſea, you muſt keep the top of Bock a litle without the point of Schuyteneſſe, and then you ſhall goe cleare of them; but if you bring Bock cloſe by or to the point of Schuyteneſſe, and ſaile ſo right in for to run about cloſe by the point of Schuyteneſſe, you ſhall ſurely ſaile upon thoſe foreſaid funcken rockes and fowle grounds.

From the ſouth end of Schuyteneſſe, the Liet lieth in firſt north and north and by weſt two leagues to the great Warder, which is a road ſo called after foure great Warders which ſtand there thwart of it upon the land of Schuyteneſſe, for the knowledge of this road: there ly commonly the ſhips that tarry for a winde, beeing bound either to the northwardes or to the ſouthwards, there it is very good lying in fiue, fixe, ſeven, or eight fathom, as well for northerly as ſoutherly windes, you may alſo ancker to the northwardes of the Warders about a point in fiue, ſix, eight, ten and twelue fathom, there you ſhall lye landlockt for southerly winds. The great Warder.

A litle to the ſouthwards of the Warders lyeth a bay called the Coperwyke, within it is alſo a good haven for them which are bound to the eaſtwards, and will ſet ſaile with a weſterly winde: with an eaſterly or northerly wind, you cannot wel ſhift roads from thence or come out. At the coming in to this bay lies a ſunken rock called the Coppernaile, upon it ſtandeth alwayes a great Pole, wherby you may ſee to ayoid it. Copperwyke. Coppernaile.

VVithout at the ſouth point of Schuyteneſſe on the eaſt ſide is alſo a litle bay or two, where men may anker.

A litle to the northwards of Bock, on the eaſt ſide of the Liet is alſo a Bay called Bockhaven, where men may come to anker. Bockhaven.

All theſe roads, as alſo the Copperwyke, are good for thoſe which comming from the ſouthwards, by reaſon of contrary winds cannot get to the great Warder.

A litle more ſoutherly then the Coperwike,

on the eaſt ſide of the Liet to the northwards of the Bock, lyeth in north into the land, a Sound, which ſheweth it ſelf (when you come from the ſouthwards) much broader then the right fareway, ſo that thoſe that are not there very wel acquainted, ſhould not think otherwiſe, but that it was the right chanell, and ſo ſhould lightly goup a contrary way. Therefore it is neceſſary and needfull to ſaile cloſe alongſt by Schuytenes, and not goe off from the weſt ſhore, until you come thwart of Kopperwike, then you ſhall bee within the point of the foreſaid Sound.

Notou. About a great halfe league by north the great Warder, lieth Notou, there ſtandeth a litle white church and ſome houſes, thwart of it in the Bay is alſo good anckering for northerly windes, and good road for them which are bound to the northwards. Likewiſe it is good ankering by north the point of Notou, for them which are bound to the ſouthwards. Almoſt at the north end of Schuyteneſſe is Sichſtreame. alſo a road called Sichſtreame, where is alſo good lying.

At the north end of Schuyteneſſe lyeth a litle Iland, when you ſaile up or downe the Liet, you can ſee through betwixt them into the ſea. At this Iland is alſo a good road under a rocke, or litle Iland, called Wybrants- Wybrants-eye. eye, there it is good ankering for all winds.

Betwixt that foreſaid Iland and the maine land you muſt ſaile through a narrow ſtrait, which is but a litle more then a ſhippes length broad; on the eaſt ſide whereof, which is on the ſide of the maine land, there lyeth a little rock, or ſuncken rock, therefore you muſt ſaile cloſe by the weſt ſide, that is cloſe alongſt by the Iland for to avoyd the foreſayd rock.

The Bomell. From Wybrants eye over the Bommell to the Blocx, the courſe is northnorthweſt, but firſt ſomewhat more weſterly about two leagues, betwixt them both it is on the weſt ſide all broken land, great and litle Ilands and rockes. About halfe wayes betwixt them both goeth a chanell into ſea, where men doe ſaile much in and out, and it is cleane, broad and wide. He that will run out there (comming from the northwards) may eaſily eſpye it, when he is about a halfe league paſt the Blockx. On the weſt ſide lye two litle Ilands, or great rockes, which ſhew much greater then the other rockes, theſe you muſt leaue on the larbord ſide, and run out by them ſ.ſ.w. into the ſea.

Hee that will runne in here out of the ſea, hee ſhall (when hee commeth to the end of Schuyteneſſe) ſee many little Ilands or rocks, hee muſt ſaile paſt all theſe, untill that hee get ſight of thoſe foreſayd two great rockes, and then in by them, leaving them on the ſtarboard ſide; and ſo he ſhall come ſomwhat to the ſouthwards of the Blockx, or Longholm into the Liet.

The Blocx are two rockes lying very neare The Blocx. even with the water, which you muſt leaue on the larboard ſide in ſailing up, and runne cloſe alongſt by the eaſt ſhore, through betwixt the Blocx and Longholm. Longholm Longholm. lyeth a little aboue the Blocx, within it is a good haven, where is good lying A little to the northwards of it lye two rockes more, thwart of them lyeth a ſuncken rocke which you muſt avoyd.

From the Blocx alongſt over the Bommell it is yet two leagues, firſt north, & then northnortheaſt, all alongſt by the land of Bommellhead, the ſouth end of this land is a high ſteepe point called Bommell-head, to the ſouthwards of it runneth a chanell weſtſouthweſt into the ſea called Bommel-ſound. This Bommel-ſound. channel is good for to know comming in out of the ſea. The land of Bommell head is about foure leagues long, and the firſt long Iland to the northwards of Schuyteneſſe, it is altogether low plaine land, except on the ſouth end, which is ſo ſteepe a point, as if it were hewen right off with an axe. About the middeſt between both ends of this Iland (on the ſea ſide) lyeth alſo a very high round hill called Sick, of faſhion almoſt like a ſuger- Sick. loafe, or a mans hat, and lyeth farre aboue all that low land, which you may eaſily ſee at both the ends of this Iland, and alſo further, whereby it is very good to be knowne. For to ſaile into this foreſaid chanell out of the the ſea, you muſt bring that ſteepe point of Bommell-head eaſtnortheaſt, or ſomewhat Bommell-head. more northerly from you, and ſaile then towards it. And then you ſhall leaue a great many little Ilands and rockes on the ſtarboard ſide, and the foreſaid point on the larboard ſide, and cloſe in about by it to the northwards.

A litle about this point of Bommell-head, on the Inner ſide, lyeth a haven called Bommell-haven, there lyeth a rocke before the mouth of it, and alſo a ſuncken rocke betwixt that rocke and the north point of the haven: Hee that will goe in there muſt goe in to the ſouthwards of the rock, in bethe ſouth point and the forſayd rock, leaving the rock on the ſtarboard ſide of him. So ſoone as men are within the haven, they muſt let fall their anker within itis broad and wide and men lye there landlockt for all winds.

At

Munſterhaven. At the end of the Bommell lyeth Munſterhaven in the land of Bommell-head, on the weſt ſide of the Liet, even about the poynt. This is alſo a good haven for them which are bound to the ſouthwardes, and by reaſon of contrary windes cannot get further; there ſtandeth a little white Church, thwart of it men muſt ancker in ten or twelue fathom.

Beulshaven From Munſter-haven to Beulſhaven it is north an Engliſh mile, there is alſo good anckering for ſoutherly windes, further it is Volger road north ſomewhat eaſterly to Volger-roade, before it lyeth a little Iland, under it, or by it on the one ſide or other men may ancker for all winds. Men may alſo ſaile round about it, and run in and out at both ſides of it, if they will.

Bremer-Diet-holm. From Munſter-haven to Bremer-holme the Liet lyeth north ſomwhat eaſterly about 2 leagues, there the Liet is divided into two parts, to weete, into the Old and the New Liet: the old Liet goeth through to the eaſtwards of Bremer-holm and the Iland that lyeth to the northwards of it, but the new Liet alongſt to the weſtwards of it.

Old Liet. The Olde Liet is not well to bee uſed by them which are not there very well acquainted, alſo great ſhips that draw twelue or thirteeen foote, may not goe through there.

Somewhat more then thwart of the middeſt of Bremer-holme, in the narrow of the Old Liet, lyeth a ſhowld whereupon is no more then thirteene or fourteene foote water. A litle to the northwardes of it on the eaſt ſhoare lyeth a bay called Ingheſound, where is good anckering: there lyeth alſo a bay on the weſt ſide, halfe wayes betwixt that foreſaid ſhowld and Bremerholm where men alſo may ancker.

New Liet. The new Liet is broad and deepe enough. Thwart of Bremer-holme, in the fare-way, neareſt the weſt ſide, lyeth a ſuncken Rocke, whereof you muſt take heed. For to avoid it, you muſt marke the Iland before Folgher-roade. If you keepe it ſo that you may ſee it without the north-poynt of Folgher-roade, then you cannot come too neare that ſuncken rock: but if you bring that Iland behind the foreſaid point, ſo that you cannot ſee it, you ſhall without faile ſaile right upon it; you muſt obſerue theſe marks as wel in ſailing up, as in ſailing off.

Ruigheholm In the middeſt of the Newe Liet lyeth Ruigheholme, there men lye with ſhippes faſt unto two Rings: the one is upon the Iland, and the other upon the point to the northwards of it, where they bring out Cables too.

Redholm. From the new Liet to the poynt of Root-holme it is northnortheaſt a halfe league, betwixt them both goeth out the Soltmer-fioerd. Soltmerfioerd weſtſouthweſt into ſea, which is a faire broad and large chanell. On the ſouth ſide lye ſome ſuncken rockes, but if you runne out amid the chanell, you can take no hurt of them.

At ſea men doe knowe this Soltmerfioerd by that foreſayd high and round hill Sicke, which is very good to be knowne, and lyeth two leagues to the ſouthwards of it, about halfe wayes betwixt this Sound and Bommel-ſound. The land on the ſouth ſide of Soltmerfioerd towards Sick, are ſmall white rockes, which you muſt leaue on the ſtarboard ſide, and runne in ſo amid the channell eaſtnorth-eaſt, and then you can take no hurt of thoſe foreſayd ſuncken rockes lying on the ſouth ſide of this chanell. There lyeth alſo a ſuncken rocke at ſea before this Sound on the ſouth ſide, a litle off from the north point of the land of Bommell-head, with hard windes out of the ſea, the ſea breaketh very much upon it, but it lyeth at leaſt fiue or ſixe fathome under water.

When as you come in here, you have Redholm on the larboard ſide, and you muſt run northeaſt alongſt by it, untill you come about the forefaid point.

From the point of Redholme to the narnarrow it is north, and through the narrow northnorthweſt and north and by weſt at leaſt a halfe league. In this ſtrait it is ſo narrow, that you can but even turne through it, on the weſt ſide of the ſtrait lyeth a little Iland, thwart of it is good ancker-ground in thirteene and fourteen fathom.

Rein Knaep. From the ſtraite to the Reine Knape the courſe is northweſt and bynorth two leagues: this is a little Iland without trees, cleane round about, which you may ſaile about on both ſides.

Deep ſound. Thwart of Reine Knaep on the eaſt ſhoare lyeth Deepe-ſound, a good haven for them which are bound to the ſouthward, the mouth of it is narrow, and alſo but three fathome deepe, but within it is broad and large, and twenty fathom deepe. Alongſt to the weſtwards of the Rein Knaep it is broadeſt, to the eaſtwards lyeth a point, and by it a little Iland, you may ſaile through betwixt the point and the litle Iland.

From the Reine Knaep to Bagholme the courſe is north and by eaſt a great league:

betwixt them both ly ſome Ilands and rocks, all which you muſt leaue lying on the ſtarbord ſide, there you may at divers places ſaile through and within theſe Ilands and rockes and at laſt come out againe by Bagholme into the Liet, but it is not to bee done but for them that are there extraordinary well acquainted. Men might lightly get in amongſt theſe Ilands and rockes, ſo that they ſhould not know how to come out againe. At the eaſt ſide of Bagholme men may ancker, but there ſhooteth off a little ledge of rocks from the north end, wherof they muſt take good heed.

Crabkerk. From Bagholme to Crab-kerke it is north about three quarters of a league, this is an indifferent haven for ſoutherly winds, but it is litle, there can lye no more then two or three ſhippes.

From Crabbe-kercke to Bock vp Ra, it is north ſomewhat eaſterly a league, betwixt them both runneth out the Croſſe-ſound, or Cruyſvoert weſtſouthweſt, and ſouthweſt & by weſt into ſea, which ſound is very good to be knowne at ſea, by three hills (almoſt like the Dromels on the eaſt ſide of Norway, but not ſo high) which lye threabouts within the land, which are alſo called by ſome the north Drommels; when they are northeaſt, or therabouts from you, then you are open before the Croſſe-ſound. Before the mouth of it lyeth a litle Iland neareſt the ſouth ſide, from which lye off ſome rockes to ſeawards, the broadeſt & largeſt chanell is alongſt to the northwards of it, you may wel alſo ſail thorough to the eaſtwards of the Iland betwixt it and the land, but there it is narrow, yet cleane & cleare without any dangers. When you are within it, you muſt goe in alongſt e.n.e. and northeaſt and by eaſt, and ſo ſhall come into the Liet againſt Cruyſnes, a little to the ſouthwards of Bock vp Ra.

North Drō-mels.

Bock up Ra. Bock up Ra is a litle Iland which you may ſaile about on both ſides alongſt to the weſtwards of it is the common fare-way, and alſo deepeſt. When as you ſaile about to the eaſtwards of it, & come to the north end of Bock, there it is very narrow, and there right in the fare-way (ſomwhat nearer the eaſt ſhore then Bock) lieth a ſuncken rock, there ſtandeth alwayes a pole upon it, for to avoid it, you muſt leaue it on the ſtarboard ſide, and run alongſt to the weſtwards of it. Betwixt this Rock and Bock it is no deeper then ſixteen foot. Right to the weſtwards thwart of Bock lyeth an other Iland, under it you may alſo ancker in Bockliedt. To the weſtwards of this Iland goeth through the Cobbeliet, which men doe ſaile through with bare winds, or when they muſt turn through, becauſe it is broader then on either ſide of Bock vp Ra.

Cobbeliet.

From Bock to the Watting-ſtreame it is north a league, there you cannot ſaile amiſſe. If you doe not ſaile againſt the land; for there lye no dangers, except at the weſt ſhore lyeth a ſuncken rock cloſe by the land, wherupon remaineth at low water about ten foot water. Vpon the end of Watting ſtreame the courſe is northweſt about a ſhot of a caſt peece, or a quarter of a league, & then you come thwart of litle Alefioerd, which is a haué on the weſt ſhore, where is good anckering both for a north and ſouth wind, under a high round Iland, where you ſhall lye land lockt. From thence to the Reeſtone it is north about two leagues, betwixt them both on the weſt ſhore lyeth great Alefioerd, which is alſo a haven both for northerly & ſoutherly winds, thwart of it, the fare-way is about two musket ſhots broad. The Reeſtone is a rocke under water lying by the point, where the two high hills ſtand, which men doe call the Lethoorns: theſe are two high ſharpe hilles, which men may ſee farre off, as they ſaile up or off that Liedt. Upon the Reeſtone ſtandeth alwayes a Pole, that thereby men may avoid it. You may alſo ſaile alongſt to the eaſtwards of it; but to the weſtwardes of it, it is broadeſt, and the right fare-way, over againſt it on the weſt ſhore lieth Knorwike, a haven where men may alſo ancker.

Watting ſtreame. Litle Alefioerd. Reeſtone. Great Alefioerd. Lethoorns. Knorwyke

From the Reeſtone to Werckeneſſe the courſe is eaſtnortheaſt about a quarter of a league, and then you leaue the Iland Aſland lying on the larboard ſide to the northwards of you, in it lye alſo two havens where you may alſo goe to ancker, the one called Struyſhaven and the other Schoon-haven To the weſtwards of Aſland you may ſaile to Ielteſioerd, and run out there about northweſt into the ſea.

Werckenes. Struyshaven. Schoonhaue.

When you come out of the ſea into Ielteſioerd, then you come in to the weſtwards of Aſland againſt the Reeſtone into the Liet.

Ielteſioerd.

At the ſouth point of Aſland lyeth Ielteſchaer, a litle round Iland, or rock, whereupon ſtandeth a great Iron ring, when as men come up the Liet, and with calmes are in danger to bee driven with the current to the northwards alongſt by Aſland, then they bring with the boat a cable faſt on it. Men may wend round about the foreſaid rock without any danger.

Ielteſchaer.

From Werckeneſſe to Horneſſe it is eaſt a little diſtance: when you come by it, you may ſee the town of Berghen lye before you, you

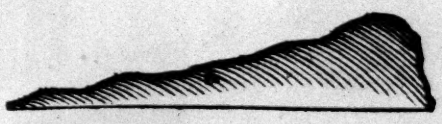
Horneſſe.

you muſt anker before it in the Waghe, in 11, 12, or 13 fathom.

To the northwards of Aſland lyeth the Iland Harle, which is about fiue leagues long; when you come from the northwards, you may runne about it on both ſides, & ſo come into the Waghe of Berghen. The Harlefioerd goeth out about north & by weſt, and north-northweſt betwixt Aſland and the land of Harle.

Harle

Harlefioerd



Thus ſheweth the Bock when you are to the ſouthwards of Scuytenes before the Liet.

Thus ſheweth the Hill Sick when you are to the Northwards of Scuytenes.

How theſe lands do lye one from the other, and from other lands.

From Scuytenes to Bõmels head n. n. w. ſomwhat northerly 7 leagues
From Bõmels head to Cruyſort northnorthweſt 9 leagues
From Cruyſoort to Harle northnorthweſt 13 leagues
From Scuytenes to the Outſeers weſt, & weſt and by north 4 leagues
From the Outſeers to Ieltefioerd, or the VVaghe of Berghen north and by weſt 26 leagues
From Scuytenes to the Flye ſouth and by eaſt ſoutherly 106 leagues
From Scuytenes to the Teſſell ſouth, and ſouth and by eaſt 112 leagues
From Schuytenes to VValcheren ſouth, 122 or 124 leagues
From Schuytenes to the Holms before Yarmouth ſouth and by weſt, or ſomwhat more weſterly 113 or 114 leagues
From Schuytenes to Flambrough-head ſ. w. and by ſouth 104 or 105 leagues
From Schuytenes to Tinmouth the courſe is ſouthweſt 104 leagues
From Schuytenes to Boeckenes weſt and by ſouth ſoutherly 72 leagues
From Schuytenes to Hitland weſt and by north, and weſtnorthweſt 66 leagues
From Schuytenes to the north end of Hitland weſtnorthweſt ſomewhat northerly 71 or 72 leagues
From the Outſeers to the Flye ſouth and by eaſt 103 or 104 leagues
From the Outſeers to the rockes Out-weers north and by weſt 40 leagues
From Ieltefioerd or the VVaghe of Berghen to Hitland weſt 48 leagues
From Ieltefioerd, or the VVaghe of Berghen to the north end of Hitland weſt and weſt and by north 50 leagues

The VVaghe of Berghen lyeth in the height of 60 degrees 15 or 20 minutes.

CHAP

CHAPT. III.

The coaſtes of Norway from Berghen to Stemmeſnes.

FROM Ieltefioerd, or the Waghe of Berghen to Olde, the coaſt lies north-northweſt, and north and by weſt about 16 leagues, that is al broken land with many rockes, where men may ſaile through within them. The Norway Barkes come off from Stade all alongſt through that broken land & rocks, and within the Iland Harle unto Berghen.

About foure leagues and a halfe to the ſouthwards of Olde, lyeth a great rowe of rockes lying three or foure leagues without the other rockes, thwart off from the ſhoare to ſeawards called the Outweeres. Outweeres.

Betwixt them and Olde lieth a good haven called Southfoort, there lye two Ilands before it, where men run in betwixt them both alongſt into the haven.

Olde. Olde is a high rock a good wayes from the land, and looſe from the other rockes by the land, but hath ſome ſmall rockes lying about it, there lyeth alſo a row of rocks a good waies off from it ſouthweſt into the ſea.

About northweſt and northweſt and by north from Olde lye two rowes of rockes, whereof ſome lye aboue, and ſome under water. When as you are either to the northwards or to the ſouthwards of Old, it doth ſhew it ſelfe with a great ſaddle in two hommockes, and going downe round on both ſides, but being thwart off, or weſtwards from it, then it lyeth in one round hill almoſt like Coll. You may (comming from the ſouthwards) runne in about to the eaſtwards within Olde northeaſt to Oldeſound, and come out againe to the northwards of Old.

Kyn. Foure leagues to the northwards of Oldeſound lyeth Kyn alſo a great rock which men may ſaile round about, and ſheweth it ſelfe with two ſharpe hommockes almoſt like a Cowes clawe, or Biſhops myter.

Waldres. Eſterdall. Betwixt Kyn & Olde goeth a great Sound into the land, upon which lye two Townes, Waldres and Eſterdall. Northweſt and by weſt from Kyn lye three or foure rockes, and alſo ſome ſunken rocks under water. Southweſt and by weſt about three leagues off from it, lye alſo ſome rockes aboue, and ſome under water.

Three or foure leagues to the northwards of Kyn lyeth Ornaell alſo a great rock which ſheweth it ſelfe in one great high round hill. Three leagues, or three leagues and a halfe to the northwards of it lyeth the ſouth poynt of Stade. But Ornaell and Olde lye about north and ſouth ſeven or eight leagues aſunder. Ornaell.

Betwixt Ornael and the ſouth point of Stade goeth in a great broad Sound, from whence men may ſaile through within the broken land to the ſouthwards to Berghen. A litle within the ſouth point of Stade is a Bay where men may goe to ancker, thwart of a Sea-beakon, and lye ſheltred for a weſt wind. Stade.

The land of Stade lyeth from the ſouth point to the north point n.n.e. and ſ.ſ.w. which is a whole maine coaſt, but full cloſe alongſt by the ſhore, with many ſmall rockes, but none that men may ſaile about within them for to haue any ſhelter for the ſea. The Norway Barkes of all places to the northwards of it, yea and all thoſe which come off from the North Cape, can ſaile all alongſt the coaſt of Norway unto Berghen, through within the rocks, except thwart of this land of Stade, there they muſt run a ſea-board through the ſea. North poynt of Stade.

Havens on Stade. Between theſe two foreſaid points are alſo two litle havens, where men may ride, but are litle or nothing uſed.

To the northwards of Stade the land lyeth with may Ilands northeaſt to the Broadſound 8 leagues. About halfe wayes lyeth a little Iland or rock called Swynoe (that is Hogges-Iland) a league from land without the other Ilands of Flowach. When you are cloſe by the north point of Stade, and go on northeaſt, you run through within that little Iland Swinoe, but with a northeaſt and by north courſe about a ſeaboard of it. Swynoe.

He that is bound to Roemſdaell, or into the Sounds of Sudmer, muſt runne into the Broad-ſound, which goeth in at the ends of the Ilands of Flowach eaſt and eaſt and by ſouth, the outermoſt of theſe Ilands is called Haſſen. When you come to the end of thoſe foreſaid Ilands, you ſhall ſee eaſt from you about two leagues, a great high ſhort Iland called Goedeu, or of ſome Godſche-ſand, and a litle to the ſouthwards of it, ſomewhat further in a great blacke rocke of faſhion like a hay-cock, or almoſt like a ſuger-loafe, it is called by the ſaylers the Cookes-broad: ſaile in right with it, but bring not that foreſayd rock to or under that Iland, but keep it cleat off without it: for els you ſhould ſurely ſaile upon the foreſaid ſuncken rockes, which lye under water at the north ſide of the Broad-ſound. Broadſound. Goeden.

From

Stemmes heft
I. Eertholm
Boe
Stortgats
Bereſandt
I. Lever
Roemdaelse Schaeren
Nieuwediepsgat
Vlieter
Lemsje
Marmse
Roemdaelsche Eglanden
Rievier van Roemsdael
Hoogte hoeck Van Horret
Sudmers-Leen
200
100
20
80
50
10
20
Oost broek
200
300
20
Goedtsant
30
50
Lugtschip
Lugtschip
Breesandt
I. Heſten
Eylandon van Flowach
Swynoe
De Cust va
wegen tuß
teſioert e
oldesandt
oldesant
olde
Noordhoeck
t Land
Spaen
Eng: e

De Cust van Noor:
wegen tusschen Iel:
tefioert en Olde

Bergen

Dosterre

Rachter

Sandwijck

I. Harlee

Ielefioert

Wtweer klippen

oldesont

olde

Duytsche mylē 15 in een graedt

Spaensche mylē 17½ in een gra.

Eng. en Fr mylē 20 in een graedt

Duytsche mylen 15 in een graet

Spaensche mylen 17½ in een graedt

Eng: en Fr: mylen 20 in een graedt

Paschaart vande
Noorweegsche Cust
van Olde tot
Stemmesheft

Waldres

Keyssandt

Oldesandt

Middelhoeck

t Landt van Stadt.

Sandhoeck

Oldesandt

Ornac

Keyn

Olde

44

From the Iland Goedeu or Godtsche-sand runneth off also a little riffe, to the southwards, or towards the southeast from it. When you come by that Iland, runne aboute by that little riffe, in betwixt it and the foresaid black rock, and anc'er a little within that riffe, under Goedeu, runne not farre within it, for to avoide a suncken rock, which lyeth somewhat further in, not farre from land, there stand two little warders upon the shoare, a little within the riff for knowledge of the roade.

Behinde, or to the northwardes of Goedeu lyeth the little Iland Geske: upon it standeth a little church on the south side, before it men may also ancker in eight or tenne fathom cleane ground.

A little within Goedeu, on the east side of Geske lyeth an other Iland, greater then Geske, called Walderoe, on both sides of the southeast pointe of that Iland men may ancker in good cleane grounde, and lye landlockt for all windes.

From thwart of Geske and Walderoe lyeth a greate multitude of Rocks northwest so farre into sea, that comming a seaboard alongst by Swynoe with a northeast course, you should fal farre within them.

He that commeth from the northwardes may saile by west alongst by these rocks to Goedeu, and leaue the aforesaide suncken rocks (lying on the north side of the Broade sound) on the starboarde side of him, and runne in about by the pointe of Goedeu, as hath beene before saide.

You may also runne in to the northwards of Goedeu, to wete, in betwixte Goedeu and Geske, and ancker vvithin Geske, or under Walderoe, but it is not vvell to be done, but for them, which are there verie vvel acquainted.

There lye manie Rocks, some aboue, and some under water, whereof men must take heede. In at the Broade sounde is the best and surest.

For to runne from Walderoe to Roemsdale, goe on to the northwards, alongst by the great Iland Luycko, it is in that farewaie, tenne, twentie, fortie, sixtie, and eightie fathom deepe, but euen past Luycko runneth a stoneriffe thwarte over the farewaie, on against the point of the maine land, you must thereabouts edge off from the Ilands on the larboarde side, and runne indifferent close alongst by that pointe of the maine land on the starboard side, and then you runne over the deepest of that Stoneriffe, to weete in three fathome or thereabouts, as soone as you shall be over it, it is againe verie deepe, of tenne, twentie, and presently an hundred and two hundred fathome. Runne on still by the land on the starboard side, and verie close alongst by it, and leaue all the Ilands lye on the larboard side, and so you shal come into the River of Roemsdale.

Towards the southeast from the aforesaide Iland Goedeu or Gotschesand, goeth a greate deeper river into the land, to Sickule, Honighdale, and other lading places more.

To the northwards or northeastwards from Geske lye (amongst a greate manie other rocks and little Ilands) fiue greate Ilands: the first called Luco, which is a high Iland, like as also the second, betwixt these two goeth in a channell, about southeast called Luycksound. Luco. Luycksound

Upon the third called Harmsoe lyeth also a high hil, but is at both endes somewhat lowe. Harmsoe.

The fourth and smallest called Lemsoe or the lowe Iland, sheweth it selfe in two or three lowe hommocks. Lemsoe.

The fifth called Flemseu, or the Roof Iland, is a greate and lowe Iland, but seemeth little to see to at sea, because there lyeth but one hommock upon it (not verie greate) and of fashion as the roofe or cabben of a Hoye, at the west end highest. Within the east point of that Iland is a good roade in a bight, where men lie landlockt for all winds. Flemseu. Roofe Iland.

To the northwards or eastwards of Flemseu or the Roofe Iland, goeth in a channell called Nogwe Fioerd, lying in east and by south, at which men may runne in to Roemsdale.

Without these foresaid Ilands off from Luco unto Boede lyeth a greate multitude of cut-rocks, great and small, called the Roemsdales Schares. Roemsdales Schares.

Eastwards from the Roofe Iland or Flemseu lyeth, amongst other rocks and little Ilands, the Iland Lever, which men may saile about on both sides, either whether they be bound outwards from Roemsdale to Beresound or Boe, or inwards from Boe or Beresound, and will runne through the foresaid Ilands. Lever.

Beresound is a hauen within some rocks euen to the southwards or westwards of the pointe Boe, there it is good lying, but not good to come into without a Pilot, or some one that is there well acquainted. Beresound. Boe.

Boede is an out-pointe, with a neck or smal pointe of land, fast to the maine land, alongst to the southwards of it men may runne in, and up to the southwards to Beresound, or els goe to ancker in a bay on the north side behinde Boe, by some houses where they may lye sheltered for a west winde.

From Boe to Stemnesnest the coast lyeth aboute northeast two leagues, betwixte them both aboute halfe waies lye manie smal lowe black outrocks, as if they were sowne alongst the shoare, called the Stoppels, betwixte them Stoppels

and the maine land, you cannot ſaile through with greate ſhippes without greate daunger. The Norwaie Barckes runne alongſt within them, and alſo ancker there within, under a Rock, which is ſomewhat greater then the reſt, and lieth about the middeſt of the Stoppels (or ſomewhat nearer the maine land) called the Eartholme.

All the Ilands betwixte Broadeſound or Flowach and Boe, belong under Roemſdale.

Of the Tydes and courſe of the ſtreames.

BEtvvixte Berghen and Stade the water riſeth and falleth, but it keepeth no certaine tyde: a ſouthſouthweſt and northnortheaſt moone maketh there moſt full ſea.

Betvvixte Stade, Luyckeſound and Boe a ſouthſouthweſt & northnortheaſt Moone maketh high vvater,

Courſes and Diſtances.

FRom Ieltefioirde or the Waghe of Bergen to the Rocks of Outweers northnorthweſt, and north and by weſt aboute — — — 11 or 12 leagues.

From the Outvveers rocks to Old northnorthweſt, and north and by weſt betvvixte — — — 4 and 5 leagues.

From Olde to Kyne north and by eaſt, & northnortheaſt — — 4 leagues.

From Olde to Ornael north, and north and by eaſt — — 7 or 8 leagues.

From Ornael to the ſouth point of Stade northnortheaſt — — 3 leagues.

From the ſouth pointe of Stade to the north pointe northnortheaſt — 8 leagues.

From the north pointe of Stade to Svvyno or Svvynooſt northeaſt, and northeaſt and by north — — 4 leagues.

From Swynoe to the outermoſt of Flovvach, or the Broade ſounde northeaſt and by eaſt — — — — 4 leagues.

From the north point of Stade to the Iland Heſſen, or the Broadeſound northeaſt 8 leagues.

From Heſſen to Goedeu eaſt, and eaſt and by ſouth — — — 3 leagues.

From Svvynoe alongſt without the Roemſdaels ſchares to Boede the courſe is northeaſt & by north — — —

From Stade to the north ende of Hitland weſtſouthweſt — — 69 leagues.

From Stade to the eaſt pointe of Iſland vveſtnorthweſt — — 200 leagues.

From Stade to Greeneland northweſt aboute — — — 330 leagues.

Heigths.

THe Outweers rocks lye in 61 degrees.

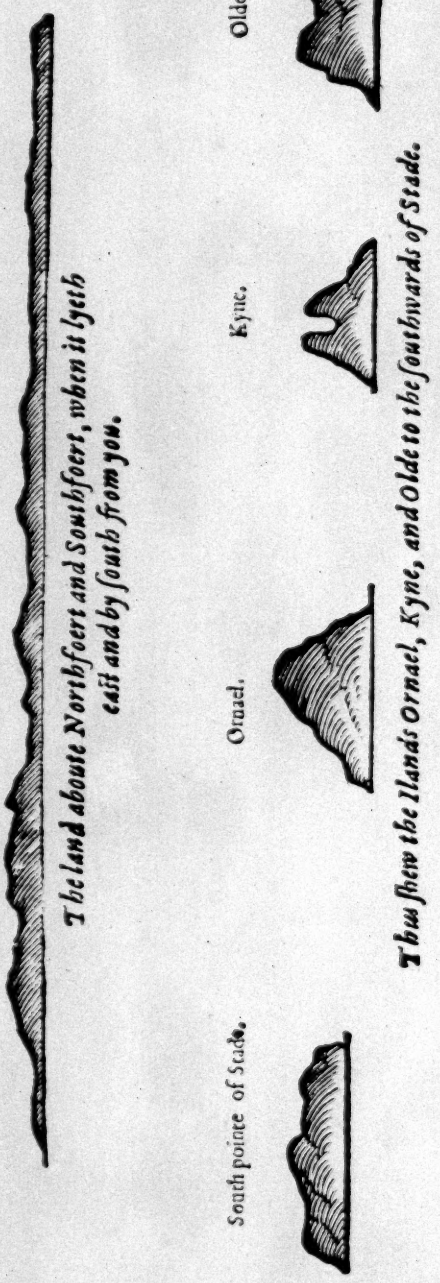
The Iland Kyne in 61 degrees and 30 minutes.

Stade in 62 degrees.

Broad ſound, or the Iland Goedeu in 62 degrees and 30 minutes.

Luyckſound in 62 degrees and 40 minutes.

The Stoppels & Boede in 63 degrees and 28 minutes.

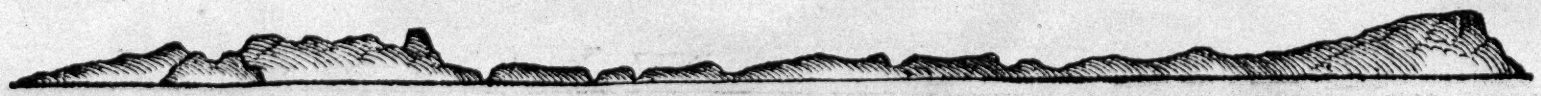


When

Stade.

When the ſouth point of Stade lyeth northeaſt and by north from you, then it ſheweth with the land from thence ſouthwards within Ornael, Kyne and Olde, like as it is pourtrayed in this and the figure following.

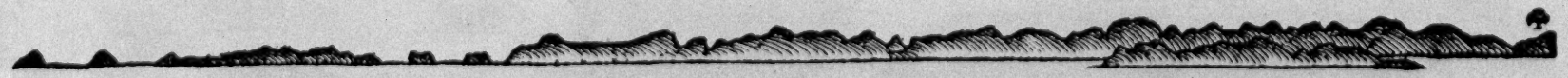
The land aboute Olde.



This followeth the former figure.

When the point of Stade lyeth ſouthſoutheaſt eight leagues from you, it ſheweth thus.

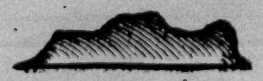
From Bergben to Stemmeſers.



When Stade is ſouthſoutheaſt from you, and Goedeu eaſt four leagues, then the land betwixt Stade and the Broade Sound ſheweth like as is pourtrayed in this and the figure following, and then you are open before the Broadſound.

This followeth the former figure unto Stade.

Thus sheweth the point of Stemnesnesh or Heynst.



The forme of the Iland Luycko when it is east and by north from you.

Thus sheweth the Iland Goedeu being east from you.

Flemseu.
Roofe Iland.

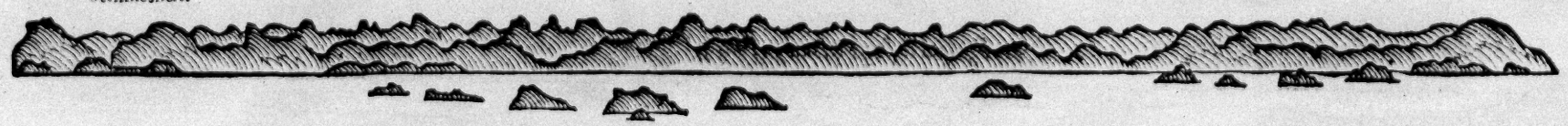
Lemseu.
Low Iland.

Harmsoo.

Luycko.

Thus shew the Ilands of Roemsdale, when the middlemost of the three highest and the westermost is southeast from you about three leagues.

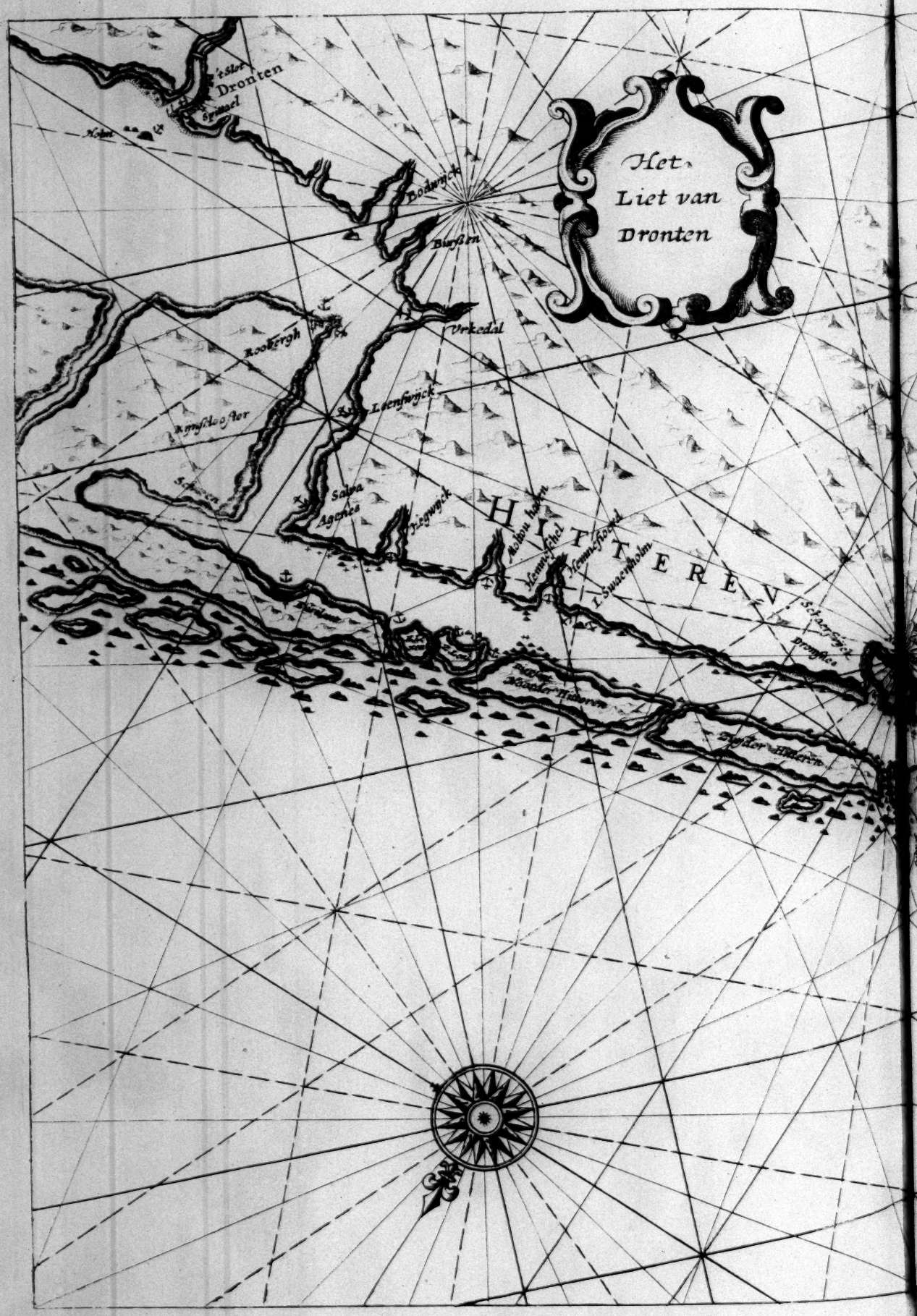
Stemnesnest.



The Ilands of Roemsdale.

Thus sheweth the land betweene Stemnesnest and the Broadsound, when as you saile a seaboard, alongst by the Roemsdaels Ilands and Schares.

CHAPT


Het
Liet van
Dronten
Dronten
Bodwijck
Burßtn
Vrkedal
Lenswijck
Salva
Agnes
HITTEREV
Schanswijck

Duitsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng. en Fr. mylen 20 in een graedt

NOORDER ZEE

Noorthorn

Mangelbergh

Frehol

Smeeckholm

Ascuholmen

De Wigel

I. Grip

Swaensgat

Scaelwyckshaerdt

Wenmansfoort

Mondsfoort

Texel

Vlieland

Ameland

Schiermonnickoog

Rottumerplaet

Delfzijl

Emden

Borkum

Norderney

Juist

Wangeroog

Spiekeroog

Langeoog

Baltrum

Norderneyer Tief

Accumer Ee

Memmert

Borkumer Riff

Borkumer Tief

Ruden

Ruden Diep

Ruden Tief

Ruden Balg

Ruden Watt

Ruden Ee

Ruden Riff

Ruden Sand

Ruden Hoek

Ruden Hoek Tief

Ruden Hoek Balg

Ruden Hoek Watt

Ruden Hoek Ee

Ruden Hoek Riff

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Ruden Hoek

CHAP. IIII.

The Liet of Dronten.

FRom Stade to Stemneſheſt (or Stemmeſnes) the courſe is alongſt without the Ilands northeaſt & by north about ſix and twentie leagues, the land betwixt them both is called the Government of Roemſdael.

Stemneſheſt is a high point good to be known, it ſheweth it ſelf (when as you get ſight of it, coming from the ſouthwards, or the weſtwards) in two hommocks, thwart of it goeth in the Liet, with divers entries. About a ſhot of a caſt peece from the pointe lieth a black round rock, altogether alone, not verie great, called the black Oxe. Betwixt it and the point goeth in an entrie, (called after the foreſaid rock, alſo the black Oxe) northeaſt and by eaſt, it is not verie wide, and upon the ſhowldeſt foure or fiue fathome deepe at lowe water, the nearer to the Oxe the deeper, & the nearer to the maine land the ſhowlder water. A little within the rock, (the black Oxe) lyeth an other greate Rock or Iland, pale of coulour, called Whiteholme, which you muſt leaue (in ſailing in) alſo on the larboard ſide, you cannot ſaile through betwixt it and the black Oxe, becauſe from the one to the other it is all full of rocks, ſome aboue and ſome under water. A little within or to the ende of Whiteholme lyeth a ſuncken rock, which you muſt leaue alſo on the larboard ſide.

In calme weather or ſmooth water you cannot well ſee it, but when it doth blowe anye thing harde, you may well perceiue it by the breacking of the ſea upon it. On the ſtarboard ſide within Whiteholme, lieth a greate multitude of rocks, as if they were ſowed alongſt the ſhoare, amongſt theſe rocks a little within or to the eaſtwards of the pointe of Stemneſheſt lyeth Smeerholme, an Iland where men may ride under, and lye ſheltred for all windes, excepte with eaſt & northeaſt windes, which blow there in open, with thoſe windes you cannot alſo come out there, neither with ſouthſoutheaſt, ſouth, ſouthſouthweſt, and ſouthweſt winds, you cannot alſo come in there. You muſt ſaile in there from the northwards, behind the Iland. In the going in (which is not aboue a cables length broade, and eight or tenne fathome deepe) lyeth a litle rounde rock, at high water, about a fathome aboue water, by which you may runne about on both ſides.

Northnorthweſt aboute a halfe league from the black Oxe lyeth alſo a greater and broader, but a lower rock, called the Voghell, which at high water lyeth a litle aboue water, but with a ſpring the ſea runneth alongſt over it. Betwixt it and the black Oxe there ſeemeth to lye in a broade and wide channel, but betwixt them it is full of ſuncken rocks and fowle grounds under water: when it is ſmooth water, it is in no wiſe good to runne in there, but in foule weather & with a growne ſea, and that you cannot doe otherwiſe, you might runne in there by the breaking of the ſea.

A greate halfe league northnorthweſt from the Voghell lye yet ſome rocks lying to the eaſtwards, called the Mewholmes, betwixt them and the foreſaid Rock the Voghell goeth in a broade and large channell, verie cleane without any dangers, which (after the Rock) is alſo called the Voghell, there men may ſee all that can doe hurt. The marks for to finde this chanell, comming out of the ſea, are two hills, verie good to be knowne, which lye from thence eaſt and eaſt and by north within the land. The weſtermoſt is a hill ſomewhat lowe, and rounde of faſhion, almoſt like a flat hat, called the Clapmuts. The eaſtermoſt is a high ſteepe ſharpe hill, aboue on the one ſide with a cutte, like as a ſteppe, called the Manghelbergh. When theſe are one in the other, then they are about eaſt, & eaſt and by north from you, and then you are alſo right open before this chanell.

For to ſail in there keepe theſe two foreſaide hils one in the other, and ſail in right with them eaſt, and eaſt and by north, or (when as you come within the Voghell) ſomewhat more eaſterlie, ſo that you haue the foreſaide hills out a head, a little on the larboarde ſide, untill that you come by the maine land, & then eaſtnortheaſt alongſt by the ſhoare, (if you be bound to Dronten) unto the Iland Edou or Edoe.

Aboute a league within the Voghell lye two rockes, the weſtermoſt is high and ſomewhat rounde, the other is lowe and alſo round, and lyeth to the eaſtwards from the firſt, towards the land, you ſhall runne with the aforeſaide courſe of eaſt, and eaſt and by north off from the Voghell, aboute a ſhot of a caſt peece alongſt to the ſouthwards of the two rocks. About half waies betwixt them and the Voghell, (but neareſt the two rocks) lye two ſuncken rocks, theſe you leaue with the ſame courſe alſo on the larboard ſide, you may ſee the ſea alwaies breake upon them, except in verie ſmooth water.

You may alſo ſail through betwixt theſe two foreſaid Rocks and the Mewholmes, to weete alongſt to the northwardes of the rocks, untill you come into the Liet, leaving theſe two rocks on the larboard ſide, and the Mewholms on the ſtarboard ſide.

Alongſt to the northwards of the Mewholms

For to come into the Liet alongſt to the northwards of the Mewholms.

and thoſe two foreſaid rocks is alſo a channell where men may ſail through into the Liet, then you muſt leaue thoſe two Rocks to the ſouthwards on the ſtarboard ſide, and ſome other rocks to the northwardes of them on the larboard ſide of you, and ſo come alſo into the Liet.

About three quarters of a league within thoſe two foreſaid Rocks, lyeth a great ſuncken rock right in the middeſt of the farewaie, which breaketh alwaies, and at low water is uncovered, about which you may ſaile on both ſides. From this ſuncken rock to Sweggeſound, the courſe is eaſt, and eaſt and by north a league, but the Voghell or the Black Oxe and Swegghesound are diſtant about three leagues.

Swegghesound.

Swegghesound is a little hauen behinde three great Rocks, with a little Iland of an Engliſh mile long on the eaſt ſide of it, when you ſaile alongſt by it, being but a little off from the ſhoare, you cannot diſcerne this Iland from the maine land, but it ſeemeth to be all whole land, he that is not there verie wel acquainted cannot perceiue that to be an Iland, before that he come cloſe to it, for to runne in behinde it. You may ſaile into Swegghesound either to the eaſtwards of that Iland, or to the weſtwards of it, according as the winde will ſerue. To the weſtwards of Swegghesound or the three foreſaid rocks, at the weſt ende of the foreſaid Iland lye a great multitude of rocks and foul ground.

For to ſaile into the weſter channel, you muſt leaue them all on the ſtarboard ſide, and runne in betwixt them and the three foreſaid rocks: when you come to the end of thoſe three rocks, you muſt looſe up to the ſouthwards about by them towards the northeaſt or north, and ancker there in ſeuen or eight fathome, there you ſhall lye landlockt for all winds, but with a ſtorme out of the weſt, the growne ſea can come in rowling there through. You may alſo ſaile in further behinde the rocks, untill you come in behinde the foreſaid Iland in a little narrow bay, there men doe lye in two fathome and a halfe, or three fathome, and alſo ſheltred for all windes. In this hauen of Sweggeſound the ſhippes commonly doe lye there to tarrie for the winde. He that is bound to the weſtwards, may runne out to the ſouthwardes of the three foreſaid rocks, and he that is bound to the eaſtwards, may ſaile out to the northvvardes, through betvvixte the land and the Iland, but that channel is verie narrovv, and not aboue tvvo fathome deepe.

Bremſnes.

A halfe league to the eaſtwards of Svvegghesound lyeth the hauen of Bremſnes, a litle quarter of a league vvithin it, on the ſtarboard ſide, ſtandeth a little church, vvith ſome houſes, vvhich you ſhall eſpie behinde a point, vvhen as you are come ſomevvhat vvithin, there dvvelleth the Governour of Normer Leen. Men vvere vvonte to come to an ancker there to paye cuſtome, but novv the Kings Cuſtomer dvvelleth over againſt it in little Fooſſen, ſo that novv at this preſent, men may eyther goe there, or to Little Fooſſen for to paye there cuſtome, according as occaſion doth ſerue.

For to ancker before Bremſnes, you muſt looke out for tvvo beackons, vvhich ſtand by the church upon the vvater ſide, thvvarte of the innermoſt is the beſt Roade, and alſo the beſt grounde, let your ancker fall there, in tvventie, fifteene, eight or tenne fathome, that is neare by the ſhore, for there it is verie ſteep riſing ground, and make you faſt vvith a havvſer to the beackons, there you ſhal lie landlockt for all vvinds, you may not alſo anker no where thereabouts, then in the foreſaid place, by reaſon of the great depth, and verie ſteepe grounds.

Little Fooſſen or Fooſſound is a narrovve hauen, lying to the northvvardes, over againſt Bremſnes, betvvixt tvvo lands. In theſe tvvo places lye the ſhips commonly to tarrie for the vvinde, they that are bounde to the eaſtwardes before Bremſnes, and they that are bound to the vveſtvvards in Little Fooſſen. Men may alſo ſaile from Fooſſen to the eaſtvvards, through betvvixt the foreſaide lands, and come into Stangvvixfioird againe in roome into the Liet of Dronten, but it is a verie narrovv channel, and not vvel to be done for them vvhich are not there verie vvel acquainted.

Little Fooſ. ſound.

Weſtnorthvveſt from the hauen of Bremſnes goeth a channel through the rockes called Fleſſound, after three round Rocks called the Fleſſes, vvhich lye in a rovve vvithout the eaſt ſide of this channel, and thereby is verie good to be knovvne. A little vvithin the three Fleſſes, lyeth a greate black flat rock, vvhen you are by or in the hauens mouth of Bremſnes it lyeth vveſtnorthvveſt, or ſomevvhat more northerlie from you. For to runne out from thence at that channel, ſaile right with the aforeſaide black flat rock, and runne to the ſouthwards of it cloſe alongſt by it, leaving it and the Fleſſes on the ſtarboard ſide, (to the northwards of this flatte rock and the Fleſſes it is all full of rocks, ſome aboue & ſome under water) you ſhal then leaue on the larboard ſide of you, two other rounde rocks, which you ſhall ſee lye aboute a ſhot of a caſt peece eaſtnortheaſt, or northeaſt and by eaſt one from the other. When you are come without the Fleſſes, you ſhal be without al the rocks, but ſomewhat to the weſtwards of them lyeth a greate rowe of rocks, lying weſtnorthweſt a good waies into ſea, you may runne weſtnorthweſt alongſt by them unto the ende: or when you are come without the Fleſſes, you may ſet your courſe ſomewhat more northerlie, for to get

Fleſſound.

Three Fleſſes.

get ſea roome betimes. In this foreſaid channel there is no danger, that can hurte you, but you may ſee it. In the offing you may knowe this foreſaid channel, by the foreſaid three Fleſſes.

The markes for to finde Fleſſound comming in out of the ſea, are two high hils, the one called Frekoll, lying upon an Iland towardes the ſoutheaſt not farre from Bremſnes, the other called Northorne, lying farre within the land. Frekol is a hil with two hommocks, whereof the ſouthermoſt is the ſmalleſt and loweſt. Northorne is a hill much higher, with a ſharp toppe, and lyeth alwaies white, covered with ſnowe. When this hill and the foreſaide ſouthermoſt hommock of Frekoll ſtand one in the other, (then they are ſoutheaſt & by ſouth from you) and that you ſaile in right with them, you ſhall without faile fall right open before Fleſſound. It is a channel of a ſhort inlet, and verie commodious, as alſo Grypſound, for them which comming from Dronten, Edou, or any other place in the Liet, and before night cannot ſayle to the channels of the black Oxe or Voghel, for to runne through them into ſea.

Frekol. Northorne.

About a quarter of a league to the eaſtwards of Bremſnes lyeth Stangwycxfioerd, a large broade ſound, at the eaſt pointe lyeth a greate manie rocks, within it lyeth a hauen called Hamerſound, you may not come in there but with a Pilot, except you be there extraordinarie well acquainted.

Stangwicxford. Hammerſound.

A quarter of a league within that foreſaide pointe, on the north ſide of Stangwycxfioirde lye two ladeplaces, Iorianwagh and Lynwagh, men runne in there to the northwards, behinde ſome rocks, but it is alſo Pilots water.

Iorianwagh. Lynwagh.

Towards the ſoutheaſt from Iorianwaegh men may ſaile farre within the land, into manie divers Sounds, as Stangwixfioird, Schaelwicxfioird Northfioird, Walsfioird, Wenningfioird and other more. Upon the land of Iorianwagh lyeth the high mountaine of Toeſter, in two hils, to the eaſtwards of it upon the nexte land lyeth the mountaine of Stadebuye, alſo in two hilles, as Toeſter. Theſe hils of Toeſter and Stadebuy, when you come from the weſtwards alongſt the Liet, lye right behinde one the other, & ſeeme then to be no more then one hil, but being thwarte of them in the Liet, or at ſea, each ſheweth in two, which is together foure verie high hills, and are commonly called togeather without difference Toeſter Poeſter.

Toeſter Poeſter.

Betwixte Toeſter and Stadebuye runneth through a narrow Sound, into the Northfioird, called Soolſound. To the eaſtwards of Stadebuye runneth alſo another ſound through into the Northfioerde, called Emmerſound, within which on the north ſide, cloſe by the Northfioirde is a ladeplace, where men doe lade good deales.

Soolſound. Emmerſound.

A quarter of a league in the Liet, to the eaſtwards of Emmerſound, runneth in an other Sounde, at the entrie broade and wide, within it divideth it ſelfe into two partes. Sayling in there you muſt leaue Fiſholme and the Yellowe Iland on the larboard ſide, and a rockie Iland, called the flat Iland, with manie Rocks on the ſtarboard ſide. The Yellow Iland is not well to be diſcerned from the maine land, for thoſe which are not there wel acquainted, the ende of the Northfioird runneth there aboute behinde it, and maketh it an Iland. The Norwaie barcks runne much there about behinde it. To the ſouthwardes of the flatte Iland lyeth a Rock or little Iland, called Flatholme, betwixte them both is good anckering in tenne or twelue fathome, and landlockt for all winds.

The Yellow Iland. Flatholme.

Through this Sounde men doe runne into Eurſound, a ladeplace lying in the Northfioird, there ſtandeth a little church on the weſt ſide of the flatte Iland. Betvvixt the little Iland is alſo a good hauen, where men may lye in three, foure, or fiue fathome, it is not broade but cleane. To the eaſtwards of this Yellow Iland lyeth the high land of Dromſnes. From thence eaſtwardes, further up into the Liet, towardes Dronten or Agenes it is moſt all whole land, and not ſo broken, as to the weſtwards of it.

Eurſound. Dromſnes.

Thvvarte of the rocks of Hammerſound (lying on the eaſt ſide of Stangwycxfioird) lye h a faire channel called Grypeſound, one of the beſt channels for to come in out of the ſea into the Liet, it is aboute a quarter of a league broade, and goeth in cloſe to the eaſtwardes of the Iland Grype.

Grypeſound.

Grype is a little rounde Iland lying from the Voghell northeaſt and by eaſt diſtant aboute ſeuen leagues, upon it dwell manie Fiſhermen, which goe from thence to ſea, to fiſh upon divers bancks, of fortie, fiftie, ſeuentie, eightie, and hundred fathome, foure, fiue, ſixe, ſeuen eight, and ſome tenne leagues without the land, which they knowe to finde by markes on the ſhoare. On the north ſide of Grype there lye but two or three rocks cloſe to the ſhoare, ſome ſaye that thereaboutes is ancker grounde in twelue fathome. On the ſouth or weſt ſide it is full of Rocks, but they lye moſt aboue water. Aboute halfe vvaies betwixte Grype and the three Fleſſes, ſomewhat without all the other Rocks, lyeth a ſuncken rock a litle under vvater, he that runeth alongſt without thoſe rocks, muſt be mindful thereof.

Gryp.

For to goe into Gripeſound comming in out of the Sea, you muſt bring the high Mountain of Toeſter Poeſter eaſtſoutheaſt from you, and ſaile in right with it, and ſo you ſhall not faile

Grypſound.

faile to runne in ſight of the Iland Gryp, which is good to knowe from the other rocks, by the greate manie Fiſhermens houſes, which ſtand upon it, and upon no other Ilands nor Rocks thereabouts, leaue that Iland on the ſtarboarde ſide, and goe in firſt eaſtſoutheaſt right with Toeſter, being paſt the Iland Gryp, bringe Toeſter two points on your larboard bowe, and goe ſo in ſoutheaſt, and you ſhall come into the Liet betwixt Hammerſound and Toeſter From thence to the little Iland Edou are about foure leagues. About three leagues to the weſtwards of it, or a league to the eaſtwards of Grypſound in the Liet, lyeth alſo a ſuncken rock, almoſt euen with the water, & almoſt amidſt the faire-waie, neareſt the north ſide, you may alwaies ſee the ſea breake upon it, leaue it on the larboarde ſide, and runne aboute to the ſouthwardes of it, there it is broadeſt, you may for neede runne alſo to the northwards of it, through betwixt it and the other rocks, but it is there narrow.

Edou. Edou or Edoe is a ſomewhat low plain Iland, a league long, and varie narrow, which is the firſt land on the larboarde ſide, upon the Liet, that men haue ſhelter of from the ſea, to the weſtwardes of it, there is nothing but broken land, Rocks and little Ilands, where the growne ſea commeth rouling in through. Not farre from the weſt ende, upon the ſouth ſide of Edou, ſtandeth a little white church, thwart of it, or a little to the eaſtwards of it, men may ancker in eight, nine, or tenne fathome. The ſhoare is ſteep ryſing ground: If men doe come neare it in foure fathome, they ſhal be preſently faſt, but the grounde is ſoft. When as men come from the weſtwards, and wil ancker there, they muſt (comming neare the weſt ende of the Iland) continually feele with the leade for the anckerground, and ſo ſoone as they feele it, let fall their ancker, thwarte of the aforeſaide little white church, or a little to the eaſtwardes of it, ſo that the little church come to ſtand over the houſes. When as men let fall their ancker in tenne fathome, and wending up towards the land, viere out the cable, then the ſhippe ſhall come to lye there in ſixe fathome. The Liet is thereabouts aboute a halfe league broade.

Kurou. Upon the eaſt ende of Edou is alſo a little hauen called Kurou, and it is ſo little that there can lye no more then two or three ſhippes. There lyeth a little black rock not farre from the ſhoare, men doe runne in betwixte that little rock and the Iland, and ancker betwixte them both, there men lye landlockt for all winds, but the ground there is not cleane.

Glaſeu. At the eaſt ende of Edou lyeth another Iland ſomewhat long, called Glaſeu. To the eaſtwardes of it runneth a greate broade Sound into Ramsfioird. ſea, called Ramſfioird, but it is known of few. With northerly winds there commeth through a great growne ſea into the Liet.

To the eaſtwards from Ramſfioirde lieth the land of Hitteren, two greate long Ilands, Norther Hitteren, and Souther Hitteren, together about ſeuen leagues long, ſo that he that ſayleth up the Liet thwarte of them, can not perceiue otherwiſe, but that he ſaileth in betwixte two maine lands. At the ſouth ende or weſt ende of Hitteren, which is on the eaſt ſide of Ramſfioird lye two little Ilands, called Weroy, there you may ſaile in betwixt them, and ancker in good white ſand ground, you may alſo ſaile through betwixt the little Ilands, alongſt into the Liet, and then you leaue a ſuncken rock lying on the ſtarboard ſide, by the ſouthermoſt little Iland. The Iſlands of Hitteren. Weroy.

From the Iland Edou to the High land, or the pointe of Dromſnes it is northeaſt and by eaſt and eaſtnortheaſt diſtant about three leagues. Tothe weſtwards of that point, to wete, betwixt that point and the land to the weſtwardes of it called Schipnes, lyeth a hauen called Schaerſwyke. In the mouth of this hauen, aboute the middeſt of the channel, but ſomewhat nearer Schipnes then Dromſnes, lyeth a ſuncken rock, which falleth drie at low water, you may runne in aboute it on both ſides. A little within the pointe, on the ſouth ſide, ſtandeth a Countriemans houſe, before which you may ancker in fiue, ſixe, or ſeuen fathom, cleane riſing ground, which you may come neare by your leade. This hauen lyeth about a league more to the eaſtwards, then Ramſfioird, on the ſouth ſide of the Liet, fitte for to come to ancker in, for thoſe which can ſail no further by day. To the weſtwards of this foreſaid hauen Schaerſvvyke alongſt the land of Schipnes, lye manie Rocks by the ſhoare, ſome aboue and ſome under water, therefore you muſt ſomewhat ſhunne the ſouth ſhoare thereabouts, but the north ſhoare alongſt by Hitteren is verie cleane. The Liet is thereabouts a greate halfe league broade. Dromſnes. Schaerſwyke. Schipnes.

Aboute fiue leagues to the eaſtwardes of Schaerſwyke, on the north ſide of the Liet, lye the two Ilands of Lexen, to vvete, Norther and Souther Lexen, vvhich are together about a halfe league long. There the Liet lyeth betwixt both eaſtnortheaſt, and northeaſt and by eaſt. Lexen.

In ſouther Lexem is a baye, before vvhich lieth a round rock, making it there vvithin a faire hauen, called the hauen of Lexem, the beſt hauen of al the Liet. Iohn Geurtſon Boogart of Amſterdam, hath (at his owne charges, for the commoditie of ſhips that come there) cauſed to be made a great Iron ring: men doe ancker either to the eaſtwardes or to the weſtvvards of the foreſaid rock, vvhere they vvill in ſixe, ſeuen or eight fathome, and bring a havvſer on the

the foresaid Ring, the further men doe runne into the Bight, betwixt the Rocke and the land, the showlder it is, but all clean and clear ground.

Road under norther Lexen. At the norther end of Norther Lexen is also a place, where is good ancker ground fit for to make road in.

Moltow. Over against the haven of Lexen lyeth an other haven called Moltow, where the ships doe oftentimes ancker in the Harvest or beginning of the winter, for to set saile with an east winde, because they can hardly get to saile from Lexen with easterly winds.

Swanholm A league to the southwards or to the westwards of these havens of Lexen and Moltow, on the south shore, lyeth a litle Iland, whereupon standeth a Warder, called Swanholm, which men may saile round about; under that litle Iland it is good ankering (as wel for them which are bound to the eastwards as to the westwards) in 4 or 5 fathom good clean sand-ground.

The south side of the Liet off from Schaerswyke alongst to Hegwyke, (which is a league and halfe, and two leagues by west the poynt of Agenes) is most cleane with little fowle grounds: but from Hegwyke alongst to Agenes the coast is fowle and rocky. The north side alongst by Hitteren, is also indifferent cleane, except at the north end ly some rocks

The Terlinghen. called the Terlinghen, which lye somewhat off to the southwards from the shore into the Liet. A little to the eastwards of Hemne-

Hemneschel. fioerd, over against Hemneschell (an Orchard upon a high land) there the Liet is at the narroweſt, and no more then a halfe quarter of a league broad.

Hemne-fioerd. Hemnefioerd lyeth over against the north end of Hitteren, it is a bay where many Sawes doe stand, and abundance of good Deales are cut and laden.

To the northwardes or eastwardes of the Terlinghen, at the north end of Hitteren, in betwixt Hitteren and Lexen, lyeth a haven

Deepsound called Deep-sound, the Norway Barks (comming from the southwards) run in there along behind Lexen to the northwards.

From Lexen to the point of Agenes on the south side, or to Euriland on the north side, the Liet lyeth alongst e.n.n. and north-

Agenes. east & by east 3 leagues. Agenes is the northermost point of the Liet, you must go about by it when you are bound to Dronten.

Betwixt Norther Lexen and Euriland lye

Fossen. two Ilands, the southermost is called Fossen,

Garten. the northermost Garten, to the southward of Fossen you may sail through alongst into the sea, but not without a Pilot.

For to saile from Lexen to Agenes, run alongst by the north shore, which is the cleaneſt, the south shore is fowle. A cables length or cables length and a halfe to the westwards of the point Agenes, lyeth a suncken rocke not farre from the shore. For to avoid it and more other dangers, keepe alongst by the north shore (but take heed that you run not in to no bights or bayes) so long untill that you can see the houses upon Agenes, then sail towards it, and then you shall not sail ewithin any dangers on the south shore. On the point of Agenes is also a great Iron Ring for to morre the shippes to, there by it is deepe and steepe off-going fowle ground, For to anker there, you must bee very close by the shore before you shall finde ground, and then you must make a cable fast on the foresayd Ring, close to the shore it is about fiue or fixe fathom deepe fowle ground.

Euriland. On the north side of the Liet over against the poynt of Agenes, lyeth Euriland, a flat faire greene land, upon it standeth a little white Church about an English mile off from the shoare within the land, almost like the litle Church of Edou, thwart of it is a good road cleane flat rising sand, and claye ground, men doe commonly ancker there thwart of the first beakon in seven, eight, or nine fathom good clay ground, in sixteene, seventeen, or eighteen fathom men lye farre from the shore,

With contrary windes, or that men cannot come about Agenes, or taken with the night, they doe ancker most commonly there.

By Agenes there runneth out alwayes a great strong current to the westwardes, and by reason the lands from thence to the southwardes on both sides are very high, and the winde (being southerly) falleth there betwixt them both, alwayes strong to the northwards, men cannot (in sailing up get any thing there with turning to windewards, but in saying off they may get much by the current with turning to windewards.

A little about the poynt of Agenes on the starboard side, is a great Bay called Salva, wherein is good ancker ground, and good lying, but with northerly windes it is very hard to come out there for those that are bound out, or to the westwards.

From Agenes to the poynt of Roobergh, the Liet lyeth southsoutheast about three leagues. About halfe wayes or somewhat more, on the west side lies another bay called

Lenſwyke, where men may haue roade.

Roobergh Roade.

Roobergh is a ſomewhat flat point, to the eaſtwards or to the northwards about this point is good road in 6 or 7 fathom. A good wayes from the ſhore to the weſtwards of the poynt, the Norway Barks doe oftentimes anker, but the grond there is not cleane, and therefore it is no good road for great ſhips.

Vrkedall. Burſen. Bodwyke.

Over againſt Roobergh lye divers Bayes and havens, as Vrkedal, Burſen, Bodwyke and other more, where many Deales are cut and laden.

Holm of Dronten.

From Roobergh to the litle Iland or Holm of Dronten, the courſe is eaſt three leagues, when you are a litle paſt Roobergh, you ſhall ſoone eſpy it againſt the high land to the eaſtwards of Dronten, betwixt them both it is wide and broad. From the point of Roobergh the land lyeth up to the northwards ſo farre that at ſome places men can hardly ſee over the water. When you come by the Holm, you may ſaile about within it on both ſides, you muſt bring the Holm to the northwards of you, and ancker to the ſouthwards of it in 6, 7 or 8 fathom, according as you lye cloſe to it or farre from it, there is cleane clay ground. The Holm and the Elf, or river of Dronten, ly north and ſouth about a ſhot of a caſt peece aſunder, betwixt them both it is every where good ancker-ground, and depth of 20 and 21 fathom.

About a bow-ſhot northeaſt from the Holm lye two ſunken rockes, which at low water are uncovered. When as they are even covered with the flood, then you may ſaile in over the ſhowldeſt of the Barre into the Elf with a ſhip that draweth 11 foot.

To ſaile into the Elf of Dronten, it is Pylots water, there ſtand comonly two or three maſts for beakons, but there is no certainty of them that men may truſt unto, for they are oftentimes ſhifted: ſometimes they ſtand on the eaſt ſide, ſometimes on the weſt ſide, and alſo ſometimes on both ſides. When you come a ſhips length or two within the beakōs you ſhall come to a chindely poynt on the ſtarboard ſide, by which you muſt luff up to the Kay: upon the Barre it falleth with a ſpring tyde almoſt dry, but within it is deeper.

Of the tides and courſe of the ſtreames.

FRom Stade to Dronten a ſouth and by eaſt and north and by weſt moon maketh high water, with a Spring it falleth a fathom and a halfe up and downe, with an ordinary tyde ſcarce a fathom.

The tydes run not there alongſt the land, but the flood falleth thwart on againſt the land, and the ebbe to the contrary thwart from the ſhore to ſeawards.

Courſes and diſtances.

FRom Stemneſheſt to Gryp northeaſt and by eaſt	7 leagues
From Gryp to the Ilands of Momendall n. e.	18 leagues
From Gryp to Holy land northeaſt & by eaſt	27 leagues
From Gryp to Ruſt north and north and by eaſt	64 leagues
From Gryp to the north end of Hitland ſ. w. and by weſt	125 leagues
From Gryp to the ſouth end of Fero weſt-ſouthweſt	167 leagues
From Grype to the eaſt point of Iſland weſt, and weſt and by north	233 leagues

Of the heights of theſe lands.

THe Ilands Whitholme and Smeerholme lye in	63 degrees 44 minutes
The Iland Gryp in	64 degrees.
The town Dronten in	64 deg. 34 min.

Duÿtsche mÿlen 15 in een graadt.

Spaansche mÿlen 17½ in een graadt.

Engelsch en Fransch mÿlen 20 in een graed.

Finmarcken

NORV

Biursfiord

Quenanger

Oxefiord

Vlie

Fugelø

I. Fromsondt

Sandwiger

Talanger

Rodhelle

Lockfielle

Rollen

Wergÿti

Londigas

Tromsondt

Nordfeelen

I. Fromsondt

Samen.

I. Anenas

Westrol.

I. Loffoet

De Cuſten van
Noorweghen
tuſſchen Dronten en
Tromſondt.

G I A

Dronten

Vyck

Schongen

Wardal

Sahlen

Octevos

Stech

Heiligelandt

Traenoogh

Maelſtroom

Rust

Wergy

CHAPT. V.

The Coast of Norway from Dronten to Tromsound.

FRom the Iland Gryp to the Nomendals Ilands the course is northeast eighteene leagues, but from Gryp to the Iland Ruſt, north and north & by east ſixtie foure leagues. Betwixt them ly (beſides the Nomendals Ilands) alſo the Ilands Holyland, & Traenoch. Traenoch and Ruſt lye thirteen leagues aſunder. From Ruſt to Wero the courſe is northeaſt and by north nine leagues, but to Loffoert northnortheaſt three and thirty leagues. Betwixt Wero and Loffoert lyeth the Maelſtreame, where you may not ſaile through but at a ſtill water. By the weſt point of Loffoert you may runne in and make roade under it. And alſo you may run through from thence within betwixt the Ilands and the main land, all alongſt unto the North Cape.

Nomend. Ilands. Ruſt. Holy Iand. Traenoch. Wero. Laffoert. Maelſtream.

Betwixt the Ilands Weſterholl, Sanien and Tromſound, you may alſo run in at divers places, and make road. Thwart of theſe Ilands lye here and there in ſome places ſuncken rockes and fowle grounds, a great league and more without the land. He that ſaileth along this coaſt, may be mindfull thereof.

Sanien. Tromſound.

Of the tydes and courſe of the ſtreames.

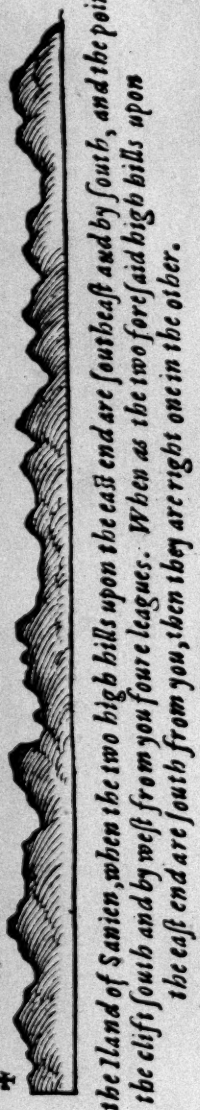
ON theſe coaſts a ſouthſouthweſt & northnortheaſt moone maketh full ſea. The flood commeth there out of the northweſt, and weſtnorthweſt, and falleth alongſt Finmark towards the North Cape.

Courſes and Diſtances.

FRom Ruſt to Loffoert n.n.e.	33 leagues
From Loffoert to Sanien n.e.	37 leagues
From Sanien to Suroy northeaſt and by eaſt	43 leagues

Heights

THe Maelſtream lyeth in about 68 degrees
The Iland Sanien in 70 degrees



CHAPT. VI.

The Coaſt of Norway from Tromſound to the North Cape.

FROM the Iland Tromſound to Surroy it is eaſt-northeaſt fifteene or ſixeteen leagues. To the eaſtwards of the Iland Tromſound, goeth in the Tromſound betwixt the Iland Fogelden and Skyrfeu, as you ſaile in there, you leaue the Ilands Loppen, and Loppenkalf lying on the larboard ſide without the other Ilands, within it are divers Ilands, bayes and ſounds, where you may ſaile in, and ſeeke road, as Oxfioert, Biurfioert, and other more. Suroy. Fogelden. Skyrfeu. Loppen. Loppenkalf.

Betwixt Loppen and Suroy men doe ſaile through Suyerſound and Stiernerſound into the river of Altenbotten, and then betwixt them they leaue on the ſtarboard ſide Niufſfioerd, Axefioerd and Langhefioerd. On the larboard ſide about by the weſt point of Suroy, on the land of Suroy, lyeth a haven, whereby is alſo a Fiſher village, both called Haeſwyke, Suroy is about ten leagues long, and lyeth on the off-ſide, eaſtnortheaſt. Altenbotten. Haeſwyke.

Nine or ten leagues to the eaſtwards of the Iland Tromſound, about 3 leagues without the land, lyeth a ſhowld of rockes a little under water. Iohn Huyghen of Linſchoten in his ſecond voyage to Nova Zembla, in the yeare 1595, ſailed with his ſhippe upon it in faire weather and ſmooth water, that the ſheathing of his Stemme was beaten off to chips; but after ſome beating the ſhippe turned off with the ſtrong current. It is to bee thought that there lye more then men can ſee, or as yet are diſcovered. Showld.

About fiue leagues eaſt and by north from the eaſt end of Suroy, lyeth the Iland Inghen, betwixt them both lye alſo Reefſholme and Shipholme little Ilands, which you may ſaile about on both ſides, untill under Ingen or Suroy. Ingen. Reefsholm. Shipholm.

When as you come in betwixt Suroy and Ingen, there lyeth thwart off from Suroy towards the other land, a good haven called Hamerfeeſt. A little further in lye two high litle Ilands, and over againſt them a road called Slechtenes. Betweene Hamerfeeſt and Slechtenes, before that you get Slechtenes, lyeth a bay on the land of Suroy, where is good roade in 25 or 30 fathom cloſe by the ſhore. A litle paſt theſe litle Ilands on the land Hamerfeeſt. Slechtenes.

uroy.

ogelom.
kvrten.
oppen.
oppen.
ait.

Alcenbotten.

Haefwyke.

Showld.

Ingen.

Reefsholm.
Shipholm.

Hamerfeld.

Slechteren.

Paſcaarte van't noordelijcſte deel van Noorwegen van Tromſondt om de Noord Caap tot Noordkijn.

Duytſche mijlen 15 voor een graad

Engelſche en Franſche mijle 20 in een graad

Refſfioerd
Huaalſond
Lerfsfioerd
Raſsfioerd
Stroomſond
Idm.
Hamerfeſt
Poſangerfiord
Poſangerneſs
REFSBOTTHE
Schultzbergy
Laxefioerd
Swartzeldt
Hawey
Lardoey
Rulſoe
Kiimnes
Moſſoe
Maggeroeſond
Alteſſoulet
Hammingerwoe
Ketelwyck
Kebus
Maggeroe
Tromsø
Kingſtaeng
Knaarwyck
Ackefioerd
Helmſtuy
I. Ingen
Camen
Noordkijn
Noord Caap
Bouweſtappen
Houſtappen
Steertſtappen
Steppen

Nordfoden
Tromsondt
Lappnäs
I. Loppen
Skerfiord
Kiobelle
Spillerom
Oxefioert
Quenanger
Burefiord
Bergbfiord
Axefioren
Lungfiord
Stenerfiord
Altenbotten
Stierneÿ
Roufsora
Suÿrfiord
Sutoey
Dunsfiord
Sandeen
Camoen
Finfiellby
Mafiiord
Idm
I. Hogom

IAN MAYEN EYLANDT.

71-30

71

60 40 30 20

Vogelklyp

Engelsche Baij

Strande

Strande

Sandbaij

Strande

Bocht van Guine

De 6 Clippen

Blinde

Blinde

Duytsche mylen

Spaensche mylen

Eng. en Fr. mylen

Beeren bergh

Vogelhoeck
K. Stet toe Swartehoec
C. Kynnaa
Kars Sond
Engelsche Bay
S. Ians haven
Behouden haven
Is Sond
Willem van Muyen haven
Koude herbergh
Kloeck ruier
Michiel Rynders ruier
Sagerdammer ruier
Schoonhaven
Hoorn Sond
Kyckuyt
Vogelbay
Hollandsche Bay
Beerhaven
M. Magdalenen Sond
Mouers Bay

80
79
78
77
76
75
74

't Nieuw gevonden lant Spitsberge

Beeren Eylandt

Duytsche mylen 15 in een graadt
Spaensche mylen 17½ in een graadt
Eng. en Fr. mylen 20 in een graadt

48

ה

of Suroy, over againſt the river of Alten, is a
Goeshop. good road called Goeſhop a fair ſand-bay.

Between Ingen and the north Cape, or the
Helmshuy. Iland Maggereu lyeth Helmſhuy, an Iland which you may ſaile round about, having on
Ackefioerd. the northweſt ſide, a bay called Ackefioerd, where men may make road for ſoutherly and eaſterly winds, on the ſoutheaſt ſide is a bay
Knaarwyke. called Knaarwyke, where men may make road, and lye ſheltred for weſterly and northerly winds.

The North Cape is the northermoſt point
Northcape. of the Iland Maggereu, a litle to the weſtward
Stappen. of it lye the litle Ilands of Stappen.

On the ſouth ſide of Maggereu even about the eaſt point, lyeth Keelwyke a good haven. On the ſame ſoutheaſt ſide, by the ſouthermoſt point of Maggereu, lieth a litle Iland called Altenſouleu, the Sound betwixt that little Iland, & the land of Maggereu is called Mag-
Maggereu-ſound. gereu-ſound, there is good roade, and ſhelter for almoſt all windes. Men may run in thorough Suyerſound to the weſtwards of Suroy within Suroy, Ingen, Helmſhuy, and other more Ilands to the ſouthwards of them, along through divers chanels to the ſouthwards of Maggereu, and come out againe into ſea betwixt the North cape and Northkyn.

From the North cape weſtwards the coaſt lyeth alongſt the Ilands weſt and by ſouth about 37 leagues, and then from thence weſtwards it falleth away more ſoutherly.

Of the tides and courſe of the ſtreames.

BEtween Suroye and the river of Alten a ſouthweſt and by weſt, and northeaſt and by eaſt moon maketh high water.

At the North cape a ſouthſouthweſt and northnortheaſt moon.

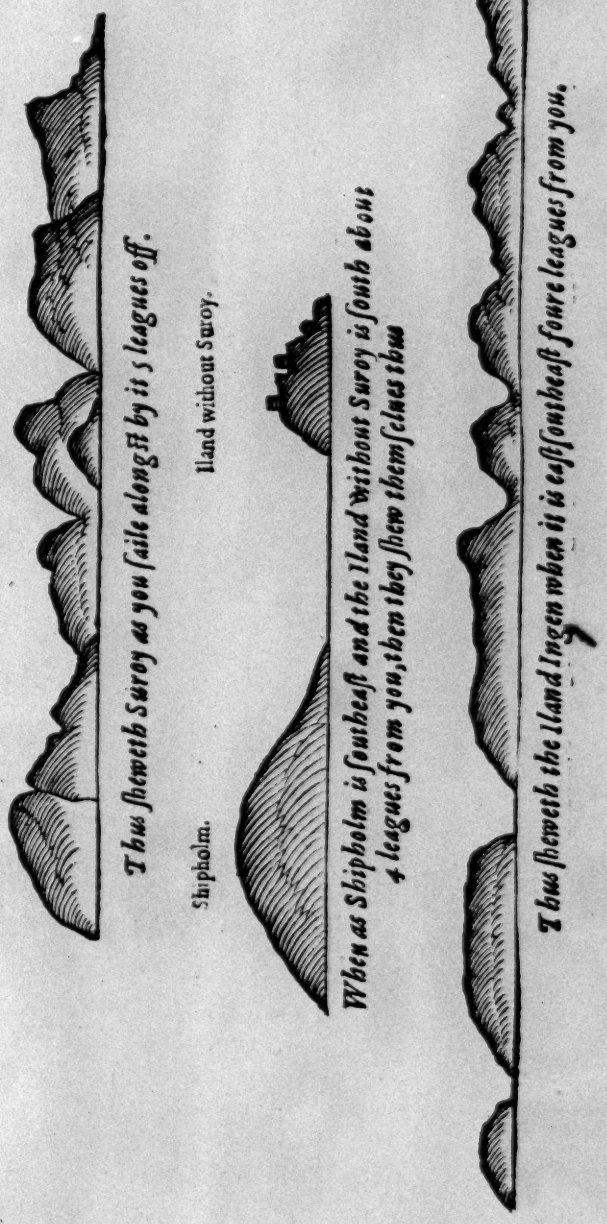
To the weſtwards of the North cape the ſtreames come out of the northweſt and weſtnorthweſt, and fall alongſt Finmark towards the North cape.

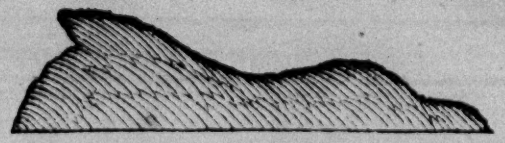
Courſes and diſtances.

FRom the Iland Tromſound to the weſtend of Suroy e.n.e. 13 or 14 leagues
From the eaſt end of Suroy to Ingen, eaſt and by north 7 leagues
From Helmſhuy to the North Cape eaſt and by north
From the North cape to Northkyn eaſt and by ſouth 12 or 13 leagues

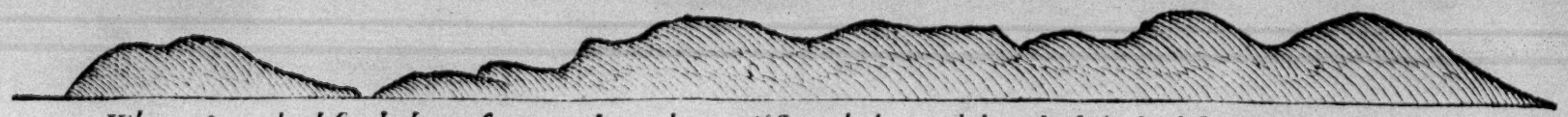
Heights.

The North cape lyeth in the height of 71 degrees 30 minutes.





This hill lying upon the Iland Lappen, you may see over Suroy as you saile alongst by Suroy from the north end to the south end.

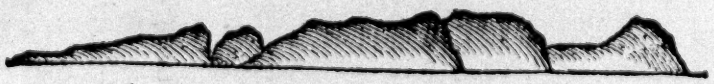


When as Ingen lyeth south thwart from you about 4 leagues, it sheweth thus, and then Shipholm lyeth south and by west from you.

Long hill.

Thus sheweth Ingen when this Long hill is southwest and by west from you.

When Helmsey is south or somewhat more westerly about 3 leagues from you, it sheweth thus.



When as Helmsey is south and south and by west five leagues from you, it sheweth thus.

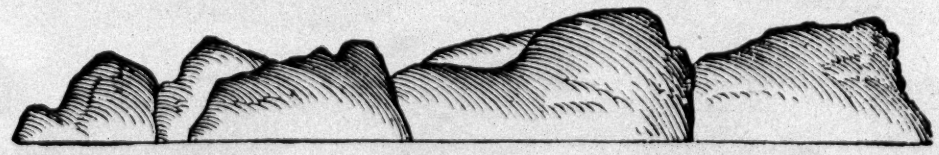
Helmsey being southwest seven leagues from you, sheweth thus.

This

Thus ſheweth Helmſey being foure leagues off from it, when the flat hill is ſouthſouthweſt from you.

In this form ſheweth the Iland Stappen, when it lyeth ſ.ſ.w. 4 or 5 leagues from you.

Thus ſheweth Stappen when it is 5 or 6 leagues ſ.w. from you.

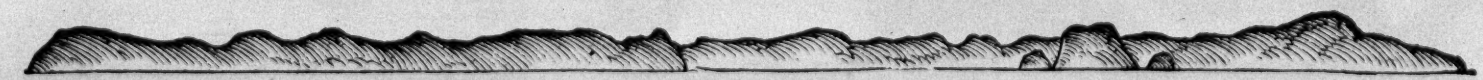


The eaſt end of Stappen ſheweth thus when you ſaile alongſt by it.

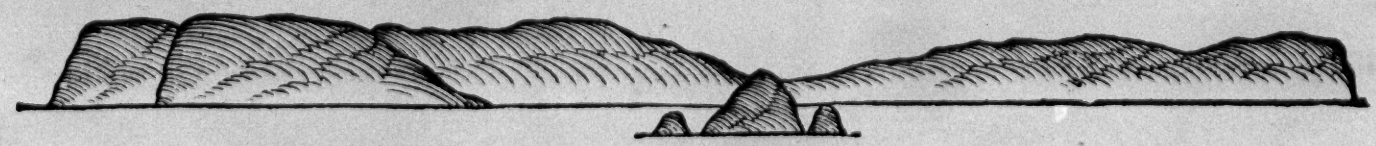
North Cape ſoutheaſt and by eaſt.

The Mother with the Daughters. ſoutheaſt and by ſouth.

Thus ſheweth the North Cape ſayling alongſt by it, the points being from you as aboue is ſhewed.



When the North Cape is ſoutheaſt, and the Mother with the Daughters ſouthſoutheaſt from you, then they ſhew themſelues thus.



Thus ſheweth the North cape ſailing alongſt by it about three leagues from land, when you are cloſe by the land, you may ſee the Mother alongſt aboue the land.

Northkyn.

Mother with the Daughters.

Thus ſheweth the North Cape when as the Mother with the Daughters are ſouthſouthweſt foure leagues from you, then the North Kyn lyeth ſouthſoutheaſt from you, as is here aboue demonſtrated.

Thus ſheweth the North cape the points being from you, as ſtandeth thereabove written, and then you may ſee the Mother from the hatches appeare even above water.

Thus ſheweth the North Cape when it is weſt and by north from you, and that you are 3 or 4 leagues without Northkyn.

Thus ſheweth Northkyn being ſ.ſ.e. eight or nine leagues from you, then lyeth the north cape 9 or 10 leagues ſ.w. from you, and then between both you may ſee yet more land in the ſouthſouthweſt.

To the Bookbinder.

Place the Cardes thus.

Numb. 41, & 42,	—	before fol. 129.
43,	—	— 131.
44,	—	— 137.
45,	—	— 141.
46,	—	— 147.
47, & 48,	—	— 149.

The ſecond parts

SIXTH BOOKE

of the

SEA-MIRROVR

of the Eaſterne and Northerne

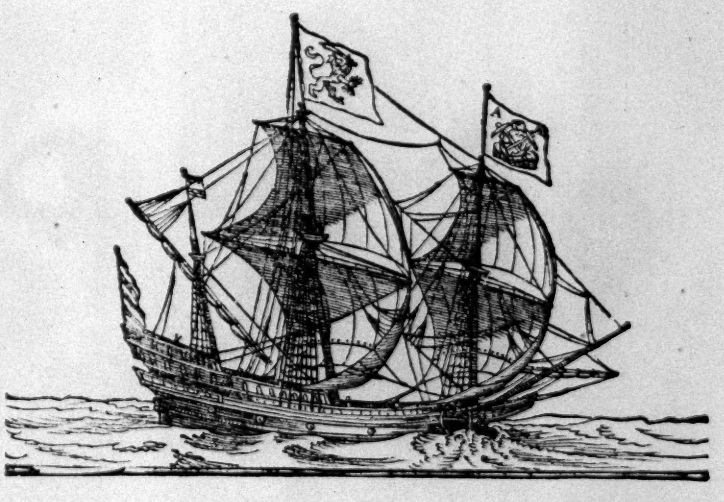
NAVIGATION.

Containing

THE DESCRIPTION OF THE Seacoaſts of Lapland and Ruſſia,

and of the whole White Sea.

From the north Cape Eaſtward to Nova Zembla.



With priviledge of the H. M. Lords the States Generall of the Vnited Provinces for ten yeares. 1625.

LAPLANDT
RVS
COREL EN
Kola
Archangel
S. Nicolas
Kandalax
Kowda
Kemelac
Kieht
Ouskay
Soute Rivier
Soute river
Zalotitza
Warsiga
Lambasche
Colcowa
C. Barfo
Lampas
Kola
Laus
Kegor
Lacfrosca
Nordmara
Karlhoef
Tarkaf
Slotnes
Noordkap
Maggeroe
Stappen
Lane bay
Hammaghoogh
Ryp eylant
Ryp eylant
Ryp eylant

Cant hoeck

I. Swarte Eylant

Oostintsarck

Cruys hoeck

Laurens Bay

S. Huysen

Veel haven

Eerste Klip

De Bay met 't Eylandeke

Laplgats

Straet van Nassau

Tonhoeck

Middens Eylant

Eylant met de Peert

Staten Eylant

Lan

Nieu Walcheren

I. Mauritius

I. Orangien

I. Colgouen

Swetynoes

Pear

Dwyker Lants Bay

Oostrygat van Yocar

R. Colozowa

R. Pitzano

Rivier van Pitzora

Pitzora

S I A

S

S

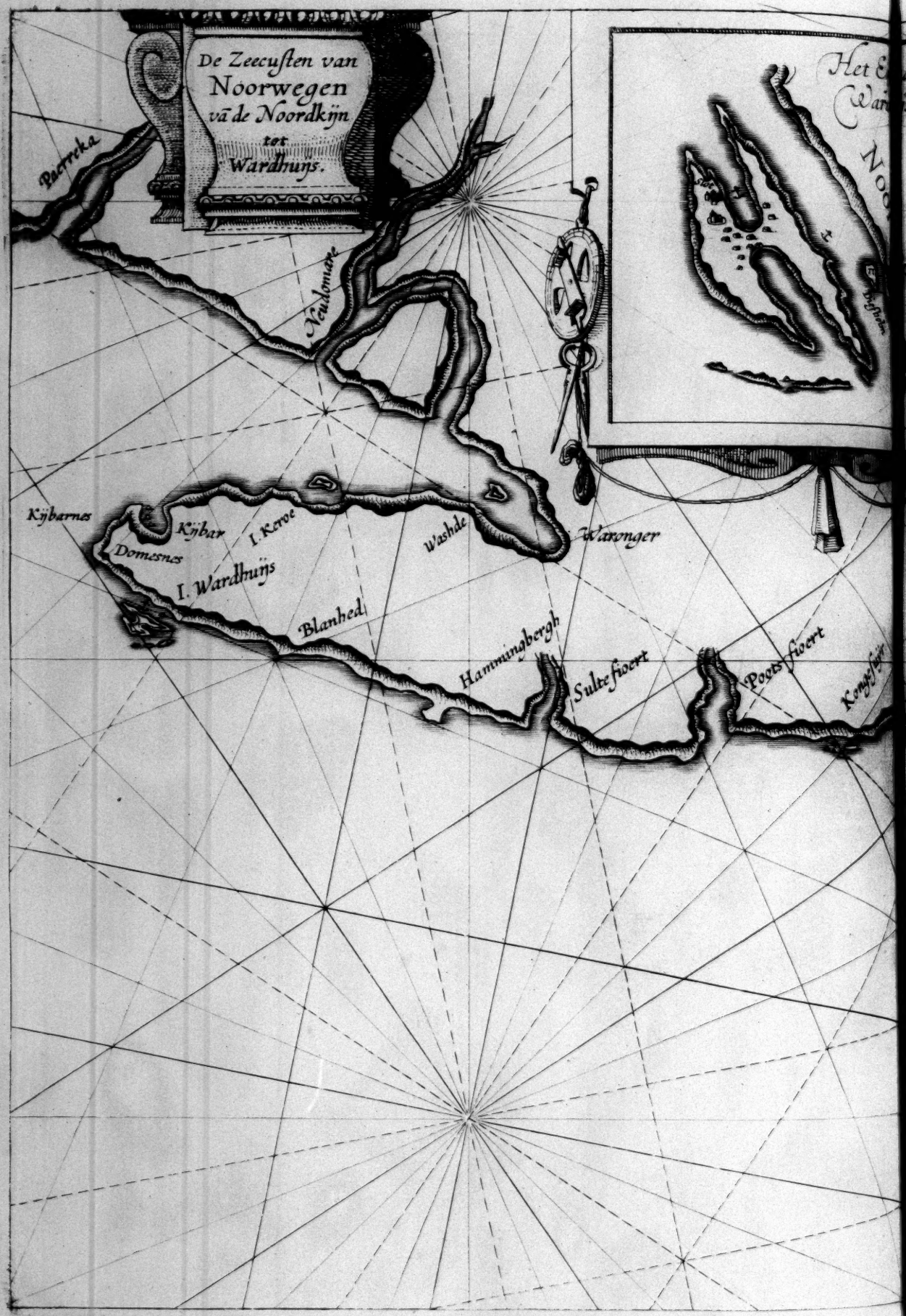
Pascaart van de Cust van Laplandt en Rußen tusschen de Noordcaap en Nova Zembla

Met Privilegie der Ed. H.M. Heeren Staten generael voor thien jaren.

Duytsche mylē 15 in een graedt

Spaensche mylen 17 ½ in een graedt

Eng. en Fr. mylen 20 in een graedt


De Zeecuſten van
Noorwegen
vā de Noordkÿn
tot
Wardhuys.
Het E
War
Noo
Pectreka
Vaidomare
Kijbarnes
Kijbar
I. Kerve
Domesnes
I. Wardhuÿs
Washde
Waronger
Blanhed
Hammingbergh
Sultefioert
Poots fioert
Kongsfior

Duytſche mijlen 15 voor een graadt

1 2 3 4 5 6 7 8 9

Engelſche en Franſche mijlen 20 in een graad

1 2 3 4 5 6 7 8 9 10 11 12

Het E dt
Wa s
Noo
rgn

Laxefioerd

Schuttingbergh

Hoop

Kynnæs, Noordkijn
Camoc

Taanelf

Sletenes

Tanebäij

Ommegang

Matkorf

Kongsfiorr

50

THE SIXTH BOOKE of the EASTERNE AND NORTHERN NAVIGATION.

Conteyning the Deſcription of the Coaſts of Lapland and Ruſſia, from the North Cape eaſtwards to Nova Zembla, and of the whole White Sea.

CHAP. I.

The Coaſtes betweene the North Cape and Wardhouſe.

Northkyn. EAST and by ſouth aboute thirteene leagues from the North Cape lyeth North-Kyne. From North Kyne to Tannebay it is eaſtſouth-eaſt tenne leagues, betweene both it is all a cleane coaſte, without Rockes or foule grounds, a high ſteepe craggie land, without anie ſtrand.

When as you come ſailing alongſt paſt North-Kyne, towards Tannebaye, you ſhal meete firſt with the pointe of Slechtnes, a plaine point lying out, verie good to be known: and then Ommegae a Fiſher village, ſtanding on the ſea ſide, euen there to the eaſtwardes of it goeth in the Tanebaye, which is a greate deepe River, which lyeth in firſt ſouth, and afterwardes ſouthweſt, farre within the land, and doth devide it ſelf into two partes, at the mouth of the River, it is at leaſt two leagues or more broad, and all over verie deepe. He that is bound into the Tanebaye, Tanebay. muſt run in al alongſt by the weſt ſhoar, becauſe he muſt lye by the weſt ſhoare, on the eaſt ſide is no roade or place, where men may ancker.

On the foreſaide weſt ſide are manie pointes and bayes to ſee to, as if there were roades, but you muſt ſaile paſt them all ſo long, untill that you ſee on the ſame weſt ſhoare a rounde hil, whereupon ſtandeth a Warder, a little paſt that, ſtand ſome Fiſhermens houſes, upon a lowe hommock, thwarte of theſe houſes runneth off from the land a lowe flatte pointe, you muſt runne in behinde that pointe, and ancker before thoſe houſes, with an ancker to ſeawards, and a hawſer faſt on the land.

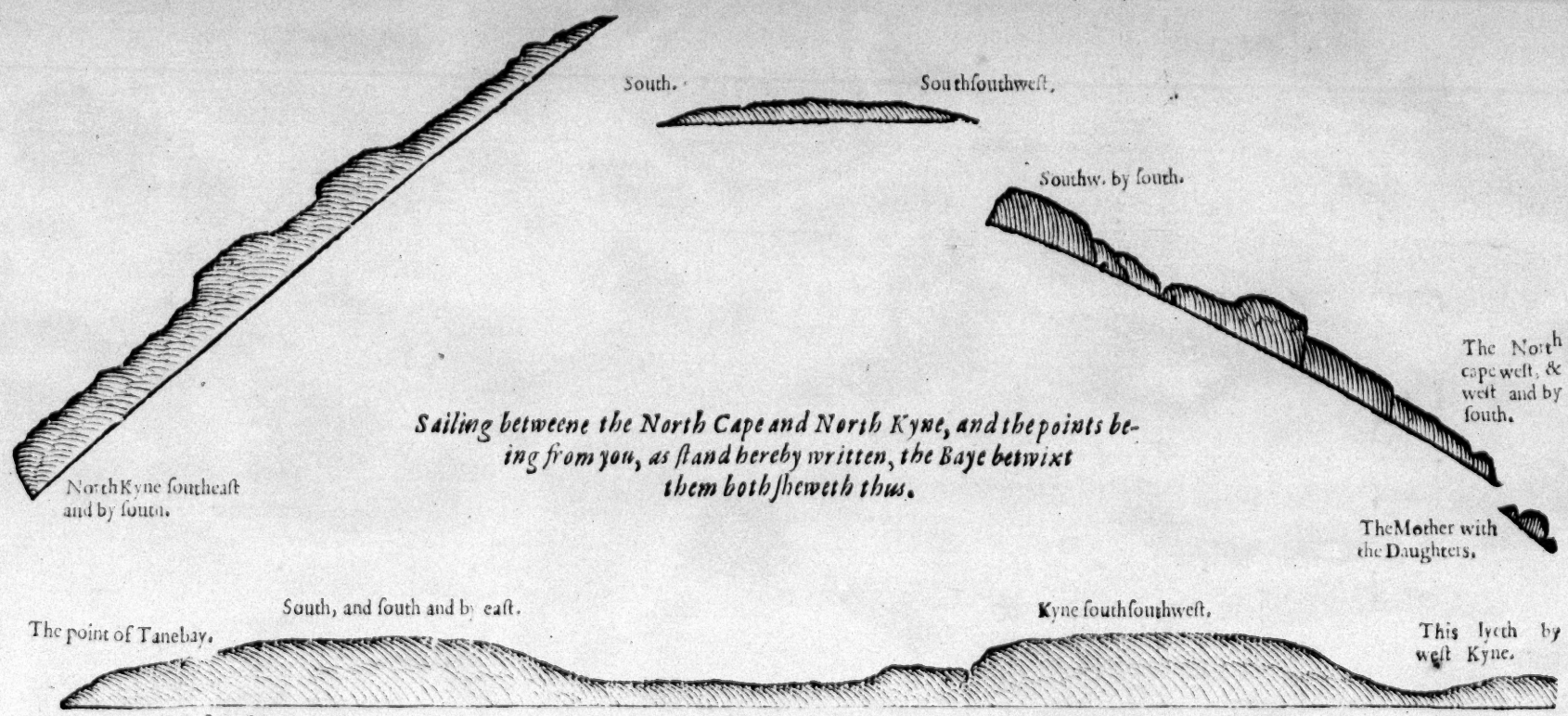
A litle to the eaſtwards of Tanebay lyeth the pointe, and the land of Matkorf, from thence Matkorf. to Wardhouſe the coaſte lyeth ſoutheaſt and by eaſt, ſoutheaſt, and moſt ſoutheaſt and by ſouth ſixteene leagues, betwixte them there is much high plaine land. Halfe waies betwixte both, but neareſt Wardhouſe, lieth a high hommock upon the high land, to ſee to like a caſtle, or Countrie houſe, verie good to be knowne, being thwarte of it cloſe by land, it ſeemeth as if there were a great Sounde, where men might ſaile into. Wardhouſe are three litle Ilands, with Wardhouſe. ſome little rocks alſo by them, the ſouthermoſt is the greateſt of the three, which onely is inhabited, upon it is a village of about 300 Norwaie houſes with a caſtle, it is about a half league long, and lyeth an Engliſh myle off from the land, lying as the coaſt moſt ſouth and north, betwixte both it is all over deepe water. On the ſouth ſide of this Iland, lyeth in a hauen or great baye aboute halfe waies the Iland, and likewiſe one alſo on the north ſide, ſo that theſe two bayes doe come ſo neare one to the other, that there remaineth no more thē a narrow chindle ſtrand about a ſtone caſt broade, deviding ſo the Iland almoſt into two, the eaſtermoſt part is the ſhorteſt, & higheſt, the weſtermoſt the longeſt. Cloſe upon the ſtrand, on the eaſt ſide of the ſouther hauen lieth the Caſtle, to the northwardes of it, upon the foreſaide chindle ſtrand, and about the Baye ſtand the houſes. In the ſouther Bay it is Roade at good lying, but the beſt roade is betwixte the Kilduyn. maine land and the Iland, about halfe waies on the ſide of the Iland againſt a Sandbay, and right againſt the Caſtle, there is good ancker ground, in tenne or twelue fathome, landlockt for all winds, except for north and ſouth winds, which

blowe thre right through, yet men haue some shelter of some points of the Iland. Men may without feare come in there, betwixt the Iland and the Maine, eyther from the southwards or the northwards, it is alover cleane and cleare, but he that commeth in from the northwardes, must runne somewhat nearer the Rock, where the gallowes standeth upon, then the Iland, because thereabouts the Iland is a little foule.

Aboute a shotte of a Cast peece northwardes from the greatest, lye the two smallest close one to another, seeming a farre off to beone Iland, are together not an English mile long, but high and rockie to see to, there lye also two or three rocks by them.

On this coaste like as at the North Cape a northeast and southwest moone maketh high water.

How these lands doe shewe themselues at sea.

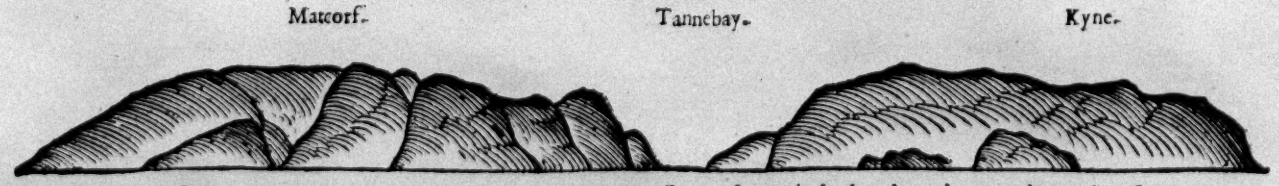


Sailing betweene the North Cape and North Kyne, and the points being from you, as stand hereby written, the Baye betwixt them both sheweth thus.

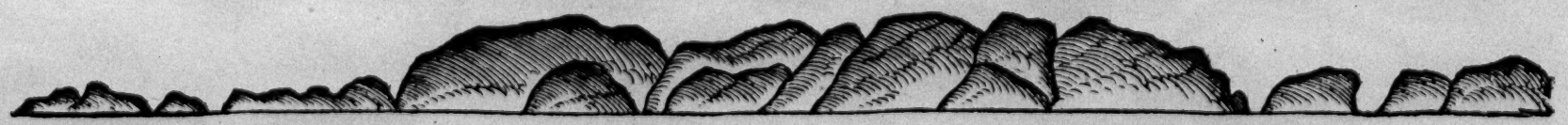
Thus sheweth the land betwixte North Kyne and Tanebay, when the North Kyn is southsouthwest eight leagues from you, and the point of Tanebay south and by east.

Thus ſheweth the land betwixt Kyne and Tannebay, when you faile alongſt by it ſeuen or eight leagues without the land, Kyne being ſouthweſt and by weſt from you.

Thus ſheweth the Tannebay when as you come off by Kyne, cloſe alongſt by the land, you may ſee theſe two points on againſt the high Innerland, the eaſt pointe ſheweth it ſelfe, almoſt like Portland, the weſt point ſheweth it ſelfe firſt ſloping, but when you come by litle and litle before the Sound then it will be alſo ſteep.

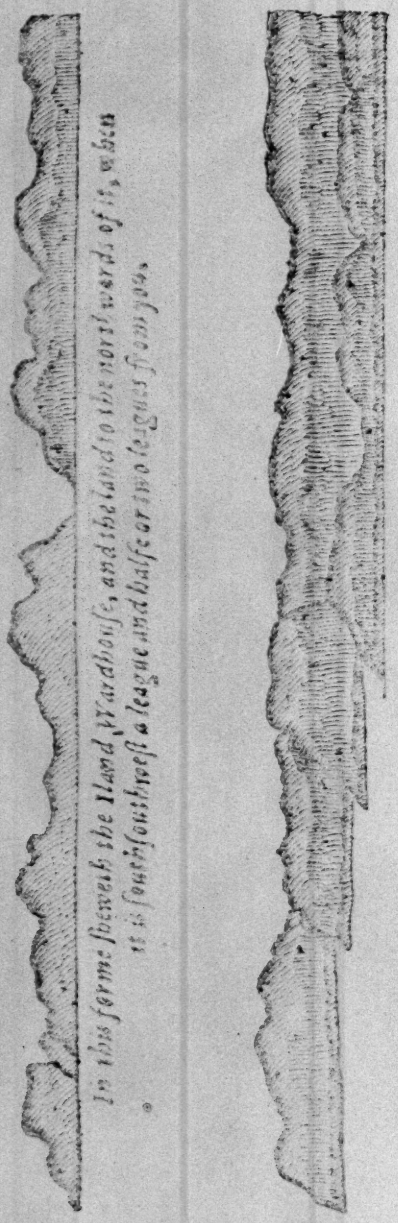


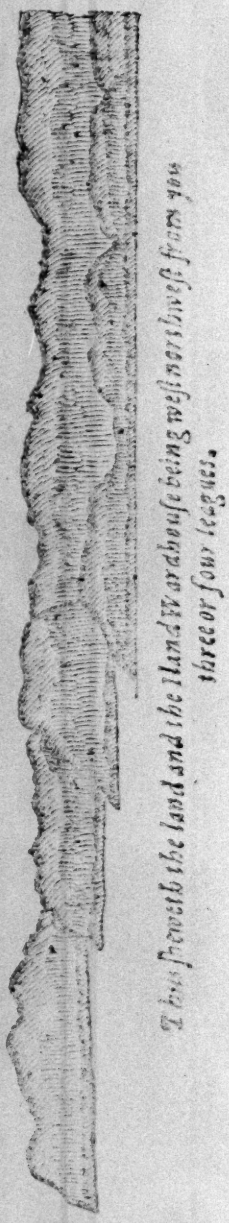
When as Matcorf is thwarte from you, then it ſheweth, and the land to the northwards of it towards Kyne, thus.



Thus is the land to the eaſtwards of Tanebay, when as you ſaile alongſt by it three leagues without the land.

Thus ſheweth the Iland Wardhouſe, when it lyeth ſouth from you three or four leagues.





CHAP. II.

The Coasts of Lapland betwixte Wardhouse and Kildayn.

FRom Wardhouse to the pointe of Kegor or the Fishers Hand, the course is southeast and southeast and by south tenne leagues. Betwixt them both is a great baye, wherein are divers Sounds and rivers, amongst other the River Pitsing, which is a great faire and large river, where men may goe in with greate shippes; a good waies within the river is good roade, there is taken and laden much Sammon, but there fal no other special wares. Southsouthwest from the pointe of Kegor lye two Hands, to the southwardes of them men doe runne into Monnickforde.

Kegor is a faire hauen, lying at the north ende of the Fishers Hand, a little within the pointe. There lye two or three Rocks at the north pointe of the hauen, and also a suncken rock in the middest of the hauens mouth: you must leaue the suncken rock, with the other rocks on the starboard side of you, and runne in by the south shoare, and edge then in behinde the foresaid rocks, and ancker there in seuen or eight fathome, the hauens mouth lyeth in southwest, it is there so good lying as in anie hauens thereabouts on the coast. Kegor

The Danes cal this hauen Kofter hauen, there was woont to be the Staple of the Fish, where everie one must come to buye: thereof the Hand is yet called, whereon Kekor lyeth, the Fishers Hand. Kofter hauen.

It is indeede no Hand, but verie neere: it is fast to the maine land, with such a verie small neck, that the Russes, which come from Kildayn, or the river of Kool, and are bounde to the River Pitsing, doe goe alongst within this land, and hall their boates over that smal neck, for not to goe about a seaboard.

From Kegor to Laus the course is alongst the shoare southeast and by south somewhat easterlie nyne or tenne leagues. This is a right plain coaste, without pointes or bayes, all alongst by Laus to Tiepena, but the south pointe of Laus lyeth out a little, upon which stand two Warders, to the northwardes of that pointe is the hauen of Laus, a faire sandbaye, there is verie good lying for southerly or easterly winds, but not for northerly winds: the windes be- Laus.

tween

Duytſche mijlen 15 voor een graad

Engelſche en Franſche mijlen 20 in een graad

Spaanſche mijlen 17½ in een graad

LAPLAN

Kola

Klincherch

Zoutkeet

Duyvels bergh

Riviere van Kola

Walnes

Traan eijland

Doggers eijlandt

Fiperd

3 Coningen

Overhaal

Blieſna

Sitenſi

I. Kildijn

Oertſen

Liets

Motkagoeba

Koewens

Laus

Tiepena

De Cuſte van Laplandt, tuſſchen Wardhuijs en Kildijn.

Petzingamon

Petſingſha reca

Stoven

Waranger

Paezreka

Aynoe

Kijbaer

Kijbaerneß

Domesneß

I. Wardhuijs

Kegor oſte Ooſter haven

LAPLAN

Dese clip leyt met haech water boven

A

B

Drie Commgen

Een Duytsche myl

Een Spaensche myl

Een Eng: of Fransˢ myl

Het eylandt Kilduÿn met de Reede - nae't leven ontworpen leggende op de hoochte van 69 graden 40 minuten

'T VASTE LANDT VAN LAPLAND

N D T.

Een Duytſche myl
Een Spaenſche myl
Een Eng: of Franſ. myl

B
C
D
E

Witte steen
Duyvelsbergh
Zout Kee
Limckbergh
Robben clip
Huys
Kola

De Rivier van Kola en het Eylandt Kildyn.

N D

51½

tweene the northweſt and northeaſt doe blowe there in open, and make there a verie greate hollowe ſea, men lye there in twvelue, tenne, and eight fathome, according as they runne ſtarre in, the farther the ſhowlder, but all cleane riſing ſandground.

From Laus a little towardes Kegor lyeth a ſmale Iland, behinde which is good anckering for caſterlie windes, in cleane ſandground, but it is ſomewhat narrow.

Tiepena. From Laus to Tiepena, it is a greate halfe league, at the pointe lye ſome little rockes, but you can not ſee them, before you be cloſe to them. Tiepena is a faire hauen, when you come from the northwardes, you muſt runne ſo farre to the ſouthwardes, alongſt by the ſhoare, untill that you ſee open into it, and ſayle in amidſt the Channell. When as you come from the ſouthwards, the hauen openeth it ſelf, being come in, you muſt edge up to the northwardes, and ancker there, there you lye landlockt for all winds, there are no dangers which may hurt you, but it is all over cleare and cleane ſandie ground.

A little aboute the pointe, to the ſouthwards of Tiepena, which is on the ſouthweſt ſide of the Fiſhers Iland is another faire hauen, where men may goe to ancker, called Kowens.

Kowens. From Laus to the River of Kola the courſe is ſouth and by eaſt and ſouthſoutheaſt aboute tenne leagues. But Kilduyn and Laus lye ſoutheaſt and by ſooth, ſomewhat eaſterly, and northweſt and by north ſomewhat weſterly alſo tenne leagues aſunder.

The river of Kola. For to ſaile up into the River of Kool or Kola, you muſt goe from Laus, or the ſouth ende of the Fiſhers Iland towardes the River ſouthſoutheaſt and ſouth and by eaſt, runne aboute by the high land of Podenwolck, and then the River ſhal open it ſelfe verie wide. When you are by the pointe of Laus, you may ſee the Iland Kilduyn, and the River of Koole, or the land by it. Betvvixt Laus and the River of Koole, is alſo a greate baye.

When as you are in the mouth of the River, it lyeth in firſt ſouth and by weſt, and then ſouth-ſouth-weſt, to that Iland, which ſtandeth marcked with A in the Carde of this River, and then by little and litle ſouthvveſt and by ſouth, alongſt by the Iland marked with B unto the Trayne Iland, then ſouthweſt and by weſt, and by little and litle aboute the pointe weſt and by ſouth, afterwardes to weſt, unto Divels pointe, over againſt it lyeth the White ſtone, which lyeth upon the land, thvvarte of it is good roade. From thence againe weſt and by ſouth, weſt ſouth-weſt, ſouth-vveſt, and ſouthſouthweſt unto Kool.

When as you come into the River, and vvill ſeeke roade there, you muſt keepe alongſt by the weſt ſhoare, being ſomewhat within, you ſhall ſee a little Iland lying cloſe by the ſhoare: from thence ſomewhat further aboute the high pointe is a Bight or Baye, and in that Bight a Sandbaye, where men may ſaue a ſhippe vvithout ancker or cable, that is a faire Sandbaye, vvhere men may runne in all alongſt. Roade in the River.

Alongſt by the north ſide it is fiue fathome deepe, and cleane ſand ground, men runne in there betvvixte the tvvo pointes, but there lyeth a black Rock in the narrow, betvvixt both ſhoares, which they muſt leaue lying on the ſtarboarde ſide, within that rock it is three and tvvo fathome deepe unto the ſtrand, within there is a faire greene field.

A little without the baye lye two Ilands, whereof the outermoſt or eaſtermoſt is the ſmalleſt. When as in ſayling up the River you come alongſt by theſe two foreſaid little Ilands, aboute halfe vvaies to the Iland marcked vvith A, there is alſo good roade, at the weſt ſhoare, you ſhall ſee upon the high land three Warders, called the three Kings, thvvarte of them is the roade. Roade. Three kings.

When you are ſomewhat paſt the Iland A you cannot ſee the River anie more open, but it ſeemeth to be ſhut, and cloſe, for that Iland by A commeth then under the high land, on the eaſt ſide.

Under the Iland mareked with B is alſo good roade and cleane ſand ground. Roade.

Likewiſe is alſo good roade under the Trane Iland, that is reckoned for the halfe of the River, to were off from the mouth of Kool.

When as you come novv a little paſt the Trayne Iland, vvhere the C ſtandeth, then you ſhall ſee out a head a black blewe hil, called the Divels nil, it ſeemeth there to ſee to, as if the River were cloſe and ſhut. It is beſt ſayling alongſt by the ſtarboard ſide, there you haue moſt all ground cloſe by the land. There are manie Bights, points, and bayes, which are not al to be deſcribed. Divelnil.

On the other ſide men doe not come ſo commonly, (except it be againſt theire wils) there ſeeme alſo to be manie bayes and roades, and alſo ſome little rivers. When as novv you come alongſt by the Divels hil, vvhere the D ſtandeth, paſt the White ſtone, then you may ſee the Klinckhil on the weſt ſide, and almoſt alongſt unto Koole. When as you may ſee the Clinck hil, there is grounde by the vveſt ſhoare for to ancker in, then there are on both ſides no daungers, but vvhen as you come Clinckhil.

ſo far into the place, where the letter E ſtandeth marked, there you muſt ſomewhat ſhunne the weſt ſhoare, becauſe of a little ſhoulde which ſhooteth off from the ſhoare, and keepe in the middle of the channel, untill that you come againſt the Klinck hil, there you muſt againe go cloſe alongſt by it: in the middeſt of the fareway lieth an Iland of rocks, which at high water is covered, whereof you muſt take good heede.

Rocks.

Robben Iland.

From the Klinckhill unto the Robben Iland ſaile all alongſt by the weſt ſhoare, the Robben Iland is alſo covered at high water, but when it is under water, then ancker thwart of the burnt trees. Thwart of the Robben Iland lyeth a verie great rock, as ſone as you be thwart of the high land, looke out carefully for it, and keepe without it, or to the northwards of it, to wete a bow ſhot, there is the roade, there you may ancker by the ſhoare ſo ſhoulde as you pleaſe, it is there good lying, and there you begin to ſee Koole alongſt by the houſe. Betwixt the Iland Kilduyn and the river of Kola, ſomewhat nearer the River then the Iland, lyeth a hauen called Blieſna Silenſi, that is to ſay, the nexte to Silenſi, there you ſaile in by a rounde reddiſh Hommock, being come within it, you muſt edge up to the weſtwards, ſo that the hauen is altogether ſhut, and that you can ſee no ſea, you may ancker there ſo deepe or ſhoulde as you will, it is there everie where cleare and cleane white ſand ground, and ſomewhat oazye and ſofte, there you may alſo without feare ſaile on againſt the ſhoare in the oaze, and ſo may ſaue a ſhippe without ancker or cables,

Blieſna Silenſi.

Kilduyn.

The Iland Kilduyn is about two leagues long and one league broade, and lyeth weſtnorthweſt and eaſtſoutheaſt alongſt the land, like as alſo the channell betvvixt the Iland & the maine land, which is at ſome places about a half league broade, and at ſome places narrower, but al over verie deep and clean. About the middeſt, yet neareſt the eaſt ende, is a fair cloſe road, betwixt two pointes, that lye out towardes the maine land, there men lye under the Iland, cloſe to the ſhoare, before the Laps tents, under the eaſtermoſt pointe, which is a low plaine point, in twelue, thirteene, or fourteene fathome, ſandground, more to the ſouthwards, it is verie deep, you ſhall ſoone haue fiftie and ſixtie fathome.

If you wil goe to ancker under Kilduyn comming from the northwardes or the weſtwardes, then runne about by the weſt ende, in betwixte Kilduyne and the maine land. When you are come ſomewhat within, you ſhall eſpie a little round Iland, there the Channell beginneth to be narrow, yet it is broade enough for to turne to windwards through, ſaile forth towards the ſoutheaſt ende, until you come in betwixt thoſe two points, and run to the foreſaid low pointe, and ancker there within in the bight, before the cabbens ſo neare to the land as you pleaſe, there you lye landlockt for all winds, as if you laye within a towne in a cloſe hauen.

For to goe into Kilduyn from the weſtwards.

For to ſaile in from the eaſtwards, you muſt ſaile in to the weſtwards by the eaſt end, ſo long nntil that you come by the foreſaid lowe pointe of the Iland, then edge up about it to the northwards, and runne into the foreſaid bight, before the Cabbens, and ancker there in twelue, thirteene and fourteene fathome, that is the chiefeſt roade.

For to ſaile into Kilduyn from the eaſtwards.

At the north or eaſt ende of Kilduyn, betwixt the Iland and the main land, there is alſo a verie good roade, in eight, tenne or twelue fathome, where men may lye ſheltered for all windes. Thereabouts is on the Iland a good water place, there the water commeth running off from the high land, there men may goe lye by it, and fill their caske lying in the boate.

You may alſo ancker under the maine land, betwixt the narrow, and the Roade of Kilduyn, at the place where the ancker ſtandeth marcked, in the carde. At the eaſt ende of Kilduyne lyeth alſo a Fiſhers village, called Kammen, at a high pointe, which is called the Sacrafice pointe.

Of the tydes and courſe of the ſtreames.

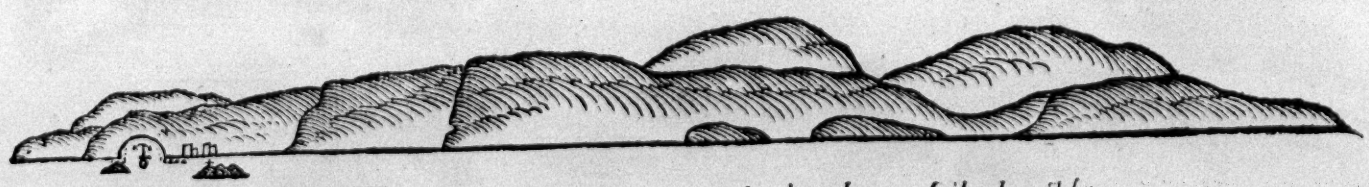
AT Kilduyn an eaſtſoutheaſt Moone maketh the higheſt water.

Alongſt theſe coaſts of Lapland to the eaſtwards of the North cape, the floud cometh out of the northweſt and northnorthweſt, and ſo runeth alongſt the land unto Orlogenes.

How

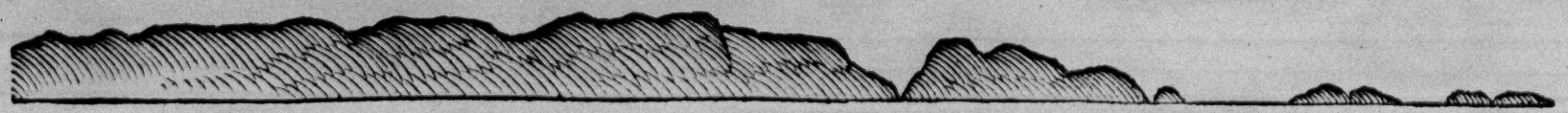
How these lands doe shew themselues at sea.

Thus sheweth the land of Kegor or the Fishers Iland, when as you saile alongst by it foure or fiue leagues without the land.



Thus sheweth the land of Kegor, or Fishers Iland, when you saile alongst by it comming from the westwards.

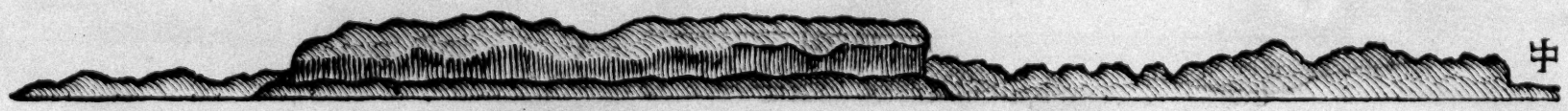
In this forme sheweth Kilduyn, when the steepe pointe lieth south and by east, and the River of Kool southsouthwest about fiue leagues from you, the land to the westwards of Kilduin is verie hillie, and the river doth shewe it self verie wide open, as here standeth pourtraied.



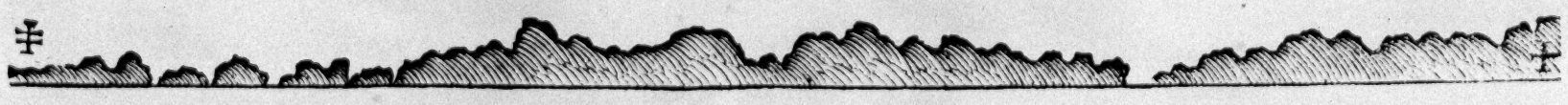
The River of Cool.

Thus ſheweth the Iland Kilduin, when the weſt point lieth ſouthweſt and by ſouth, and the eaſt point ſouth and by weſt ſomewhat weſterlie from you, the River of Cool lieth then ſouthweſt and by weſt from you, the maine land that you may ſee to the eaſtwards, lieth then ſoutheaſt and by ſouth ſomewhat ſoutherly from you: the land of Laus you may then yet alſo ſee in the northweſt.

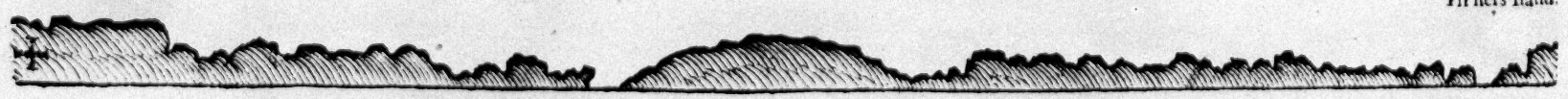
Iland Kilduyn.



Theſe three laſt figures belong one to the other by the Croſſes.

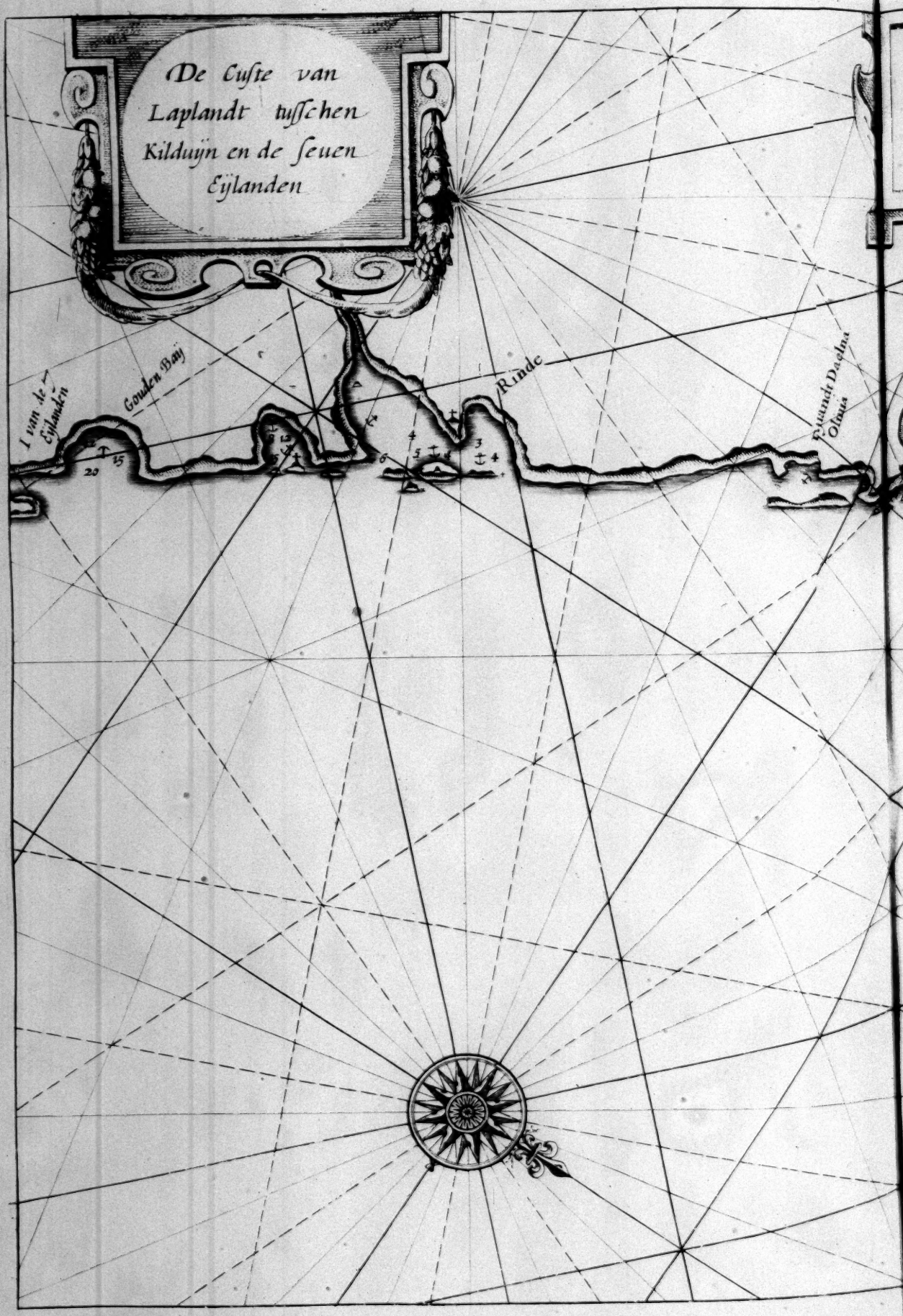


Point of the Fiſhers Iland.



Thus ſheweth the Iland Kilduyn, and the land to the northwards of it in the bay towardes Fiſhers Iland, when as you are betwixt them both ſeuen or eight leagues from land, Kilduyne being about ſouth, or ſouthſouthweſt from you.

De Cuſte van Laplandt tuſſchen Kilduÿn en de ſeuen Eÿlanden



Duytſche mylen. 15. in een Graadt

Spaenſche mylen. 17½. in een Graadt

Engelſche en Franſ. mylen. 20. in een Graadt

Saloeni Dachia

Gabriele

Waronis

Bay

Eylandt Bleſſia Obnya

Eyl. Kildunn

Tierebieri

Regina
Quadr

CHAP. III.

Of the coaſtes betwixt Kilduyn and the Seven Ilands.

FROM the Iland Kilduyn to the point of Tiribiry, the courſe is ſoutheaſt, and ſoutheaſt and by eaſt about fiue leagues, betwixt them is a great bay. In this bay, a great league from Kilduyn, lyeth a high Iland called Bliesna Olinie, which is the next or the neareſt Olinie, behinde it, under the maine land, neareſt the ſouthend of the Iland is a good roade, where three or foure ſhippes may lye very well. Bliesna Olinie.

There lieth a round hill, or high hommock upon the maine land, which ſheweth out aboue all the other hommockes, and is very good to be bnowne, upon which ſtandeth a high croſſe of two croſſes one aboue the other, to the northwards of it lyeth a flat point, thwart of it lye ſome rocks alongſt the ſhore, which at high water are covered.

At the ſouth end of the Iland Olinie, a litle from land, lyeth a rock almoſt even with the water, but you may alwayes ſee it well by the breaking of the water.

To the northwards of the Iland about an Engliſh myle, lyeth a rocke not farre from land, and alſo to ſeawards from it a ſuncken rocke, which you cannot goe over at low water.

Hee that will (comming from the northwards) goe to ancker behinde Olinie, muſt runne a good wayes to the eaſtwards of this foreſayd rocke, alongſt to the northwards of the Iland, for to avoid the foreſaid rock. Being come behinde the Iland, you ſhall eſpy the foreſayd round hommock with the croſſe, you muſt not runne paſt the croſſe, but leaue it on the larboard ſide, and ſaile in cloſe by it for to avoyd the foreſayd rockes which lye off from the flat north point, the point with the croſſe is very cleane and ſo ſteepe, that you might lye with a ſhip on againſt the ſhore without any hurt.

Hee that will come into this Roade from the ſouthwardes, let him runne alongſt by the coaſte, which is very cleane, untill paſt the foreſayd point with the croſſe, and edge up cloſe about by it, as is before ſayd.

Men doe ancker within the point in ſeven, ſixe, fiue, foure, and three fathom, ſo deepe or ſhowld as they will, there can go no grown ſea at all.

About halfe wayes betwixt the thē Iland Olinie and Tiribiry is another haven or great Bay, where men may lye landlockt for all windes.

Tiribiry is a great River and off-water, where is a great Sammon fiſhing, there men may goe in with great ſhippes, and ancker every where within it where they will in good ſandy-ground, it lyeth in moſt ſouth, and afterwardes more weſterly, the eaſtermoſt poynt lyeth out more to ſeawardes then the other, ſo that it maketh a bay, where men ride under for a northweſt winde. Tiribiry.

Two leagues to the ſouthwardes of Tiribiry lyeth Waronia, which is a great ſand-bay or haven, which at the mouth is narrow, but within it is a broad Sound, there is alſo an off-water, where is alſo much Sammon caught. Waronia.

Within this bay it is every where good ankering, ſhowld water and cleane ground.

Before the mouth of this haven lye three little Ilands, behinde them is alſo good road.

To leagues or two leagues and a halfe to the ſouthwards of Waronia lyeth a Gabriele, a tyde haven, which falleth dry within, ſo that men may goe over there dry at low water, it floweth there twelue foote up and downe, a ſouthſouthweſt moone maketh high water on this coaſt. Gabriele.

In the mouth of this haven ly three Ilands, two on the north ſide (which are the loweſt) and one one the ſouth ſide, that is the higheſt, you muſt runne neareſt the ſouthermoſt when as you will ſaile in there: being come within the Ilands, you muſt edge up to the northwardes behinde the two northermoſt Ilands, and ancker there on the north ſide of the haven, there it is ſeven and eight fathom deep cleane ground.

About a league to the ſouthwardes of it lyeth Salenſi Daelna, tha is to ſay, the fartheſt Salenſi; but betwixt them both a little to the northwardes of Salenſi, lyeth yet a great indraught, which lyeth in at leaſt two leagues into the land, and is about ſo wide as the River Tye before Amſterdam, there may lye a great multitude of ſhippes, it is there broade and large enough, and all over good ancker-ground. Daelna Sa-lenſi.

A litle to the northwards of this in-draught lyeth a little Iland, or rock, ſomwhat high, about which you may ſayle within, to weet,

through betwixt thoſe rockes and the land, but may make no roade under them.

Daelna. Silenſi. Salenſi Daelna is a great broad bay, before it lye three Ilands, which are to ſee to gray of colour, as the maine land.

To the northwards of theſe Ilands upon the point of the bay, ſtandeth three great Warders, and a little to the ſouthwards of the Ilands, on the maine land, lyeth a ſteepe hill, by which markes this bay is very good to bee known.

If you will ſaile into this bay, comming from the northwards alongſt the ſhore by the foreſayd great In-draught, a little to the northwardes of this bay, you muſt looke out for thoſe foreſaid great Warders, leaue them on the ſtarboard ſide, and ſaile in cloſe by them, through betwixt that point and the Ilands, firſt weſtſouthweſt ſomewhat within, and then more ſoutherly, untill behinde the Ilands, and ancker there in fiue, ſixe, or ſeven fathome: you may alſo ſaile further to the ſouthwards into the the baye, ſo deepe as you will, there it is all over cleane. When you come before the chanell, it ſeemeth to bee very narrow, but it is broad enough.

To the ſouthwards of thoſe Ilands is alſo a channell which is very narrow, but yet for need you may ſaile out there. The ſouthermoſt Iland, that is, whereupon the Fiſhermen dwel, is faſt to the northermoſt with a ſhowld, whereupon is at high water ten or eleven foote water, but at at low water you cannot goe over it.

Daelna Olinie. Two little leagues to the ſouthwardes of Salenſi lyeth the Iland Daelna Olinie, that is to ſay, the furtheſt Olinie, it is an Iland almoſt of faſhion like Bliesna Olinie, at the north end high, at the ſouth end lower, and upon the end very ſteepe, it hath in the middeſt, (but ſomewhat neerer the ſouth end then the north end) a low valley, where at high water the ſea doth almoſt run alongſt over it.

Behinde this Iland, not under the Iland, but under the maine land, are good roads.

For to come in from the northwardes behinde this Iland, it is a broade, large, and very deepe channell, without any dangers, but if you will ſayle in behinde it (from the ſouthwardes) then you muſt runne in cloſe by the Iland, for to avoide a fowle and ſtony riffe which lyeth off from the maine land, halfe wayes to the Iland, and ſo ſhowld that it falleth dry with ſpring tydes at low water.

About halfe wayes the Iland, neareſt the ſouth end, is a point lying out from the maine land towardes the Iland, to the northwards of it men doe ancker in ſixe, ſeven, or eight fathom.

When as you come in from the northwards, you may (ſo ſoone as you come within the points) luffe up to the northwardes cloſe about the point of the maine land into a bay, & ancker there in eight, ſixe, fiue, or foure fathom, according as you ſaile farre in, there it is very good lying. In theſe roades under the maine land it is all cleane and flat riſing ground, but under the Iland it is deepe, and the ground riſing very ſteepe, and therefore it is not good ankering there.

Betwixt this Iland Dalna Olinie, and Silenſi lye three little black Ilands, where is very good road under them in eight, ſeven, and ſixe fathom.

Rinde. From Dalna Olinie to Rinde are fiue leagues. Rinde is a very faire haven, before it lye foure little Ilands, where men may goe to ancker behinde them, behinde theſe Ilands this haven hath two bayes, upon the point betwixt them both ſtandeth a great croſſe, the ſouthermoſt baye is farre the greateſt, into it commeth alſo a river or off-water, where men doe catch Sammon. The middlemoſt Iland (which is the northermoſt ſaue one) is the greateſt and higheſt, upon which ſtandeth a great Warder, the northermoſt is ſomewhat long and ſmall, and ſo low, that at high water the ſea runneth up a good wayes upon it on both ſides, and ſo maketh that Iland ſmaller.

Betwixt that Iland and the maine land, or the north ſhore of the havens mouth, lyeth a ſuncken rock, which you muſt leaue in comming in, on the larboard ſide, and runne in cloſe by the maine land, this channell is ſo narrow, that you cannot ſaile it in, except you haue a large winde, at low water there remaineth no more then nine or tenne foote depth.

To the ſouthwardes of that great Iland, lyeth an other Iland that is indifferent high, and the ſouthermoſt of them all, betwixt that and the point of the maine land, lyeth in the ſouther channell, which is broad and deep enough, but when you ſaile in there, you muſt run neareſt the Iland, for to avoid a ſuncken rock which lyeth at the foreſaid point of the maine land.

Theſe channels both from the ſouthwards and from the northwardes lye in both alongſt the ſhores, when as that you come then within

within the Ilands you may ancker there all ouer where you will, there it is broad and large, and every where cleane and cleare. Men do anker commonly under the greateſt Iland thwart of the great Warder, and alſo behinde the northermoſt Iland in fiue, foure, or three fathom, there it is very good lying, but with a ſoutheaſt winde, the ſea commeth a little rowling in, but there can goe no great ſea.

Farre within the ſouthermoſt bay, almoſt before the river, lyeth a rock, but aboue water. Without the greateſt and the ſouthermoſt Iland, lyeth a little Iland, or great rock, ſomewhat round, you may ſaile out and in betwixt the ſouthermoſt and the greateſt Iland, alongſt to the northwards of that litle round Iland, that is, you leaue the ſouthermoſt Iland with the outermoſt litle round Iland both on the ſtarboard ſide, and the greateſt Iland with the Warder on the larboard ſide, when you ſaile out, this is a very narrow chanell, but very cleane and cleare, ſo that there is nothing to be avoyded, but onely a litle ſuncken rock which lieth at the north end of the outermoſt litle round Iland, and falleth drye at low water, nevertheleſſe it is not good to uſe it, except it were for need that you could not doe better.

He that is bound into this haven, muſt run cloſe alongſt by the ſhore, for to get ſight of the foreſaid Ilands, for by reaſon that the inner land is high, the Ilands lye ſo under the land, that men can hardly ſee them, when they be any thing off from the ſhore.

A halfe league to the ſouthwards of Rinde is another great Bay, or haven, before it lye two little high Ilands, upon the northermoſt ſtandeth a great croſſe, you may ſaile in there about on both ſides of theſe little Ilands, and alſo through betwixt them, and ancker where you will in fifteene, twelue, eight, or fiue fathom, deepe or ſhowld, according as you ſaile farre in, and lye there ſheltred for all windes, but when the winde is hard out of the ſea, thwart upon the ſhoare, there will come in ſemewhat a rowling ſea, but there can go no great ſea that can hurt you. A little to the northwards of this haven lyeth a low long Iland cloſe to the ſhore, whereby you may alſo know this coaſt, you may ſayle through betwixt this foreſaid Iland and the main land without any danger,

From this haven to the Seven Ilands are foure great leagues. A little to the northwards of the end of the ſeven Ilands, lyeth a faire great ſand-bay, where is alſo good ankering for ſoutherly and ſoutheaſt windes, but not for eaſterly winds, with a northeaſt or ſea winde, it is bad lying there, for there is no ſhelter for them, men do anker there in twenty, fifteene, or twelue fathome, according as they lye farre or neare to the ſhore. The Ruſſes call this bay the Golden Bay, becauſe the ſtrand is of red ſand. Golden Bay.

On all theſe foreſaid coaſts a ſouthweſt and northeaſt moone maketh high water, like as on the former.

Howv theſe Lands doe ſhevv themſelues at ſea.

Tiribiry. Iland Kilduyn.

Thus ſheweth the land eaſtwards from Kilduyn, when the ſouth end, or eaſt end of Kilduyn is weſt and by north 3 leagues from you.

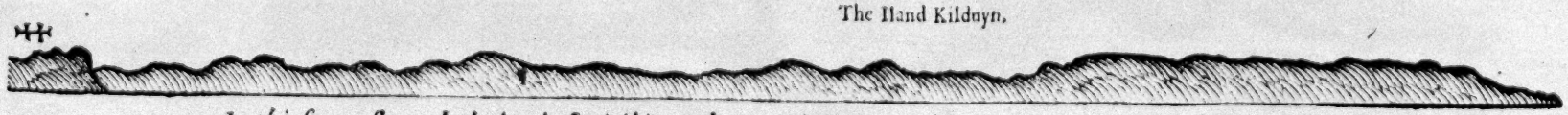
The land of Tiribiry.

The Iland Kilduyn.

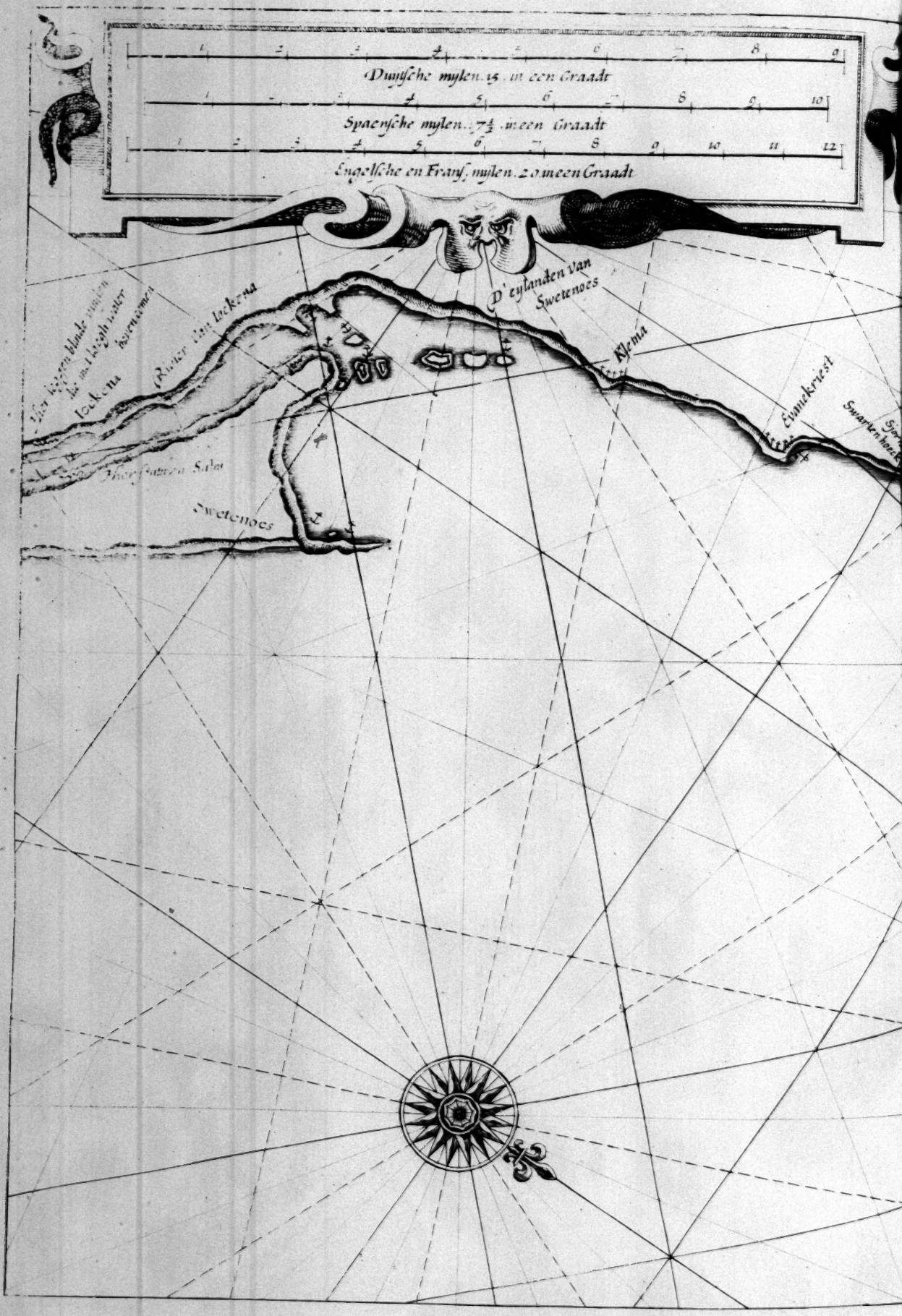
The land of Kilduyn and Tiribiry ſhew thus when as you ſaile alongſt by them foure leagues from land, about halfe waies betwixt both, neareſt to Tiribiry, as is portraied in theſe two figures here aboue, the A A one to the other.

The land of Tiribiry.

The Iland Kilduyn.



In this forme ſheweth the land of Tiribiry, when you ſaile alongſt by it, being 4 or 5 leagues off from it, and eleven or twelue leagues from Kilduyn.


Duytsche mylen. 15. in een Graadt
Spaensche mylen. 17½ in een Graadt
Engelsche en Franss. mylen. 20 in een Graadt
D'eylanden van Swetenoes
Klema
Evanekruist
Swarven hoek
Swetenoes

De Cuſten van Laplandt
tuſſchen de 7. Eylanden
en Swetenoes.

Noockoſtrove
Nagel eylandt

De Skipper

De Seven Eylanden

CHAP. IIII.

The Deſcription of the Seven Ilands, and the Coaſtes from thence ſouthwards to Swetenos.

Seven Ilands

THE Seven Ilands lye all of them alongſt the ſhore, the firſt or northermoſt is farre the greateſt of all, a high Iland. The foure northermoſt follow cloſe one to the other, and lye about an Engliſh mile, or a ſhot of a caſt peece, a little more or leſſe off the land, ſo that men may ſaile there through betwixt. The fifth is a litle round Iland, and lyeth neerer to the land, there you cannot runne through within it, which is faſt to the land with a ſhowld of rockes, whereof ſome lye aboue, and ſome under water. The two ſouthermoſt lye a good wayes to the ſouthwards of the fifth: betwixt them and the maine land you may alſo ſaile through, you may alſo runne through in and out betwixt theſe ſame Ilands every where, except betwixt the ſecond and third to tell off from the northwards, betwixt them both it is fowle.

The firſt Iland.

Betwixt theſe ſeven Ilands and the maine land, goeth a ſtrong tyde, as well of flood, as of ebbe, whereof men muſt be very carefull.

Betwixt the northermoſt and the mayne land is a good road (thwart of the ſouth end of the Iland) under the maine land, there is a faire ſand-bay, with an off-water, where is much Samon to bee caught, but it is not there uſed.

A little to the northwards of this Sand-bay lyeth a litle Iland betwixt the great Iland and the coaſt, men doe anker to the ſouthwards of that litle Iland, thwart of the Sand-bay in ſeven, ſixe, fiue, and foure fathom, ſo ſhowld as they will, there is a very even ſand-ground, riſing ſo even as if it were planed.

Over againſt the foreſayd bay men may make roade under the ſouth point of the Iland, thwart of a litle bay, there they bring a hawſer on land, and an ancker to ſeawards in nineteene fathom, there they lye ſomwhat more out of the tyde then in the baye over againſt it. Betwixt this great Iland and the coaſt is about two third parts of the chanell towards the maine land, flat riſing ground, and the other third part towardes the Iland deepe, the neerer the Iland the deeper unto eighteen and nineteen fathom.

About halfe wayes betwixt that foreſaid little round Iland, and the north point of the greateſt Iland, ſtand on the maine land ſome little Lappiſh houſes, or a little village. Betwixt the ſecond and third Iland, or neareſt thwart of the ſecond, to tell off from the northwards, lyeth yet a little village, thwart of it is a bay where men may ancker in ten or twelue fathome all cleane ſand-ground, but with a ſoutheaſt wind there cometh in a rowling ſea, but with northerly winds it is very good lying there. Second and third Iland.

Thwart of the fourth Iland on the maine land, is alſo a ſand-bay, where is alſo good road in ſeven or eight fathom for a northweſt or north winde, but with an eaſt winde it is there bad lying, that bloweth there in open, through betwixt the fourth and fifth Iland. The fourth Iland.

Even at the end of the ſeven Ilands is a great In-draught, or bay, which the Ruſſes call the Schipper, which is narrow at the comming in, but within indifferent large and wide; within it, is good road in twelue, eight, and foure fathom cleane riſing ground, but with a north-eaſt wind it is bad lying there, that bloweth there flat in. The Schipper.

About nine leagues to the ſouthwards of the Seven Ilands, lyeth a point called Siornenos, that is to ſay, Black point, it is ſo called, becauſe it is very black to ſee to, there within it the land is high, and goeth downwards low towards this point, almoſt as Swetenos. At this point the land beginneth to alter in forme, to the northwards of it the coaſt is altogether high, but to the ſouthwards of it all low and even land, ſo that thereby you may know (when you ſaile alongſt this coaſt) whether you be to the northward or to the ſouthwards of this black point. A little to the northwards of this point lyeth a high & great Iland a half league long, which the Ruſſes call Noock Oſtroue, which is the Nayle Iland, behind it is very good road. you muſt runne in there from the ſouthwards; from the northwards you cannot come in there behinde it. Noock Oſtroue.

The north end is faſt to the main land with a banke or ſtrake of ſand, which lyeth moſt part aboue water, you may ſaile in there ſo farre behinde it, as you will, and anker in ten eight, ſixe, or foure fathom, the further that you ſaile in, the ſhowlder it is, there it is very good lying, and ſheltred for all winds.

From the Siornenos, or the black point to Evanekriſt it is ſouthſoutheaſt foure or fiue leagues, that is a point with many croſſes, under it you may make good roade for ſouther-ly winds. Evanekriſt.

Kletna.

From Evanekriſt to Kletna are yet three or foure leagues, this is a point, whereupon ſtand alſo many croſſes, it lyeth out a little, but not ſo much as Evanekriſt, there you may haue alſo road for ſoutherly windes, but not for ſea-winds.

Ilands of Iockena.

From this point to the Ilands of Swetenos or Iockena, it is two leagues, theſe are ſixe in number, wherof the fiue lye alongſt the ſhore about the ſpace of two leagues, the ſixth lyeth within the other, thwart of the ſouthermoſt of the fiue: The three northermoſt lye one by the other, as alſo the two ſouthermoſt parted aſunder from the other three, the northermoſt of all theſe Ilands of Iockena lyeth from the point of Swetenos due weſt three leagues, behind it is good roade thwart of the ſouth end in fiue or ſixe fathom. The point of Swetenos is a flat point lying out, to the weſtwards of it, at the end of theſe foreſaid Ilands, goeth in the river of Iockena, where is a great Sammon fiſhing. When you are by Swetenos you can ſee litle perfectnes of theſe Ilands, becauſe the main land is much higher then the Ilands.

Swetenos.

For to ſaile into the river of Iockena.

He that commeth from the northwards, and is bound into Iockena, muſt runne cloſe alongſt by the ſhore, for to get ſight of theſe Ilands. Through foure ſeverall wayes you may ſaile through theſe Ilands into the river of Iockena: Firſt coming from the northwards, you may ſaile alongſt by the ſhore, through betwixt the ſhoare and the Ilands, (which you leaue then all on the larbord ſide) into the river.

The ſecond paſſage lyeth in through betwixt the three northermoſt, & the two ſouthermoſt Ilands, that is a broad, wide & deep, and alſo the beſt chanell of all, it lyeth ſouthweſt, and ſouthweſt & by weſt from the point of Swetenos, and lyeth in moſt ſouth, when you ſaile in there, you muſt runne neareſt the ſouthermoſt Ilands, becauſe of a ſunken rock which lyeth in this channell ſomewhat off from the third Iland, at high water you may run over it, but not at low water.

Being come within theſe Ilands, you ſhall ſee the ſixth Iland which lyeth within the two ſouthermoſt, you muſt run about by it, leaving it on the larbord ſide; When as you are then a litle paſt that innermoſt Iland, you come againſt the high point, and ſaile in alongſt amid the channell, betwixt both lands, there it is ſhowld water, to wit, fiue, four, three, to two fathom and a half, but you may ſaile in amid the chanell without feare, all alongſt unto the Lappiſh houſes, where the Sammon fiſhing is, and anker there alſo in the middeſt of the river, thereabouts lye ſome ſuncken rockes, which at low water are uncovered, whereof you muſt take heed.

For to haue the right knowledge of this channell, you muſt looke out for the high point, which lyeth at the weſt point of the river, within the Ilands, when that is behind the fourth Iland (to reckon off from the northwards) and the point of Swetenos is northeaſt, and northeaſt and by eaſt from you, then you are right open before that foreſaid channell.

Betwixt the two ſouthermoſt Ilands goeth alſo an indifferent wide channell through, where men can ſaile in, & ſo come on againſt the innermoſt Iland, which you may ſaile about on both ſides.

Betwixt the Ilands and the maine land, you may alſo ſaile through, but that is a very narrow chanel, men ſaile through it, as if they ſailed in alongſt a ditch, betwixt two Dykes.

For need, or if it were in extremity, you might alſo ſaile through at high water betwixt the northermoſt Iland, and the ſecond, and likewiſe alſo betwixt the ſecond & the third, but if you can by any meanes doe better, it is not good to doe it.

Men may ancker at divers places within theſe Ilands. Betwixt the two ſouthermoſt Ilands and the innermoſt Iland, you may haue road, where you may ly ſheltred for all winds, and ſafe from Ice-drifts out of the ſea. Within the innermoſt Iland you may alſo ancker over againſt it ſomewhat further in againſt the ſteepe point. At the rivers mouth, on the weſt ſhore is a bay where you may ſaile in, and ancker ſo neere to the ſhore as you will, in ſixe, fiue, foure, and three fathom ſoft ſticking ground, there you lye ſafe from all Ice-drifts. You may alſo ancker on the eaſt ſide, right before the ſteepe point, but there you lye not ſafe for Ice that cometh out of the river. The tyde here amongſt theſe Ilands, agreeth neare with the tide of Swetenos, it floweth there the Spring tydes, neare two fathom and a halfe up and downe.

Behind the point of Swetenos you may run into the bay, and ancker there for a north, northeaſt and eaſt winde, there is cleane ground.

Duytſche mylen 15 in een Graadt

Spaanſche mylen 17½ in een Graadt

Engelſ. en Fr. mylen 20 in een Graadt.

I. Souſnowits oſte Cruys Eylandt

LAPLANDT

R. Ponoy

De drie Eylanden

C. Pentecoſt

C. Bona fortuna

Mezeenſche Golfe

C. Burſo

Paſcaarte van de Mont van de Witte Zee

Lampas

LOMBASCHO
nae't leven ontworpen.

Lombascho

d'Eylanden van

Lombascho.

Lockena

Swartzeees

Lombascho

36

30

32

25

Colcoya

Carnna

34

RVSSEN.

Thus sheweth the land betwixt Swetenos and Orlogenes, as you saile alongst by it.

CHAP. V.

The Description of the coasts from Swvetenos to the croße Iland.

FROM Swetenos to Lombaſcho, the coaſte lyeth ſouthſoutheaſt thirteene leagues. Vnder Lombaſcho men may alſo goe to ancker, but it is not there very good lying, eſpecially with great ſhippes, the ground there is not cleane, and when the winde is out of the ſea, the ſea commeth in there rowling very much. The lying of this Roade ſtandeth drawne out at large in the Carde, with the depths ſet downe as it is at high water and neepe tydes: the water falleth and floweth there at leaſt two fathom up and downe, and at Spring tydes little leſſe then three fathome, or two fathome and an halfe Lombaſcho.

Within the point, or in the bight of Lombaſcho you may not ancker, there remaineth not aboue three foote water, and the ground is ſtony and fowle.

To the northwards of Lombaſcho lye fiue Ilands lying alongſt the coaſt almoſt halfe wayes to Swetenos.

Three leagues to the Southwards of Lombaſcho, lyeth a black ſteeepe point, untill there the coaſt lyeth off from Lombaſcho alſo ſouthſoutheaſt, but from that poynt to Orlogenes the courſe is ſouth nine leagues, betwixt them there is no place where men may ancker, but all alongſt a whole coaſt cleane and ſteepe. Orlogenes.

From the poynt of Orlogenes lyeth off a ſtone-riffe a ſhot of a caſt peece into ſea, which falleth drye a great wayes at low water, whereof men muſt take very good heed. Sconeriffe.

From Orlogenes to the river Ponnoye it is fiue leagues: betwixt them lye the three Ilands. Firſt from Orlogenes to the two firſt Ilands, the courſe is ſouth three leagues, and from thence to Ponnoye ſouthweſt and by ſouth three leagues. 3 Ilands.

A halfe league to the northwards of Ponnoye lyeth the third of the three Ilands, ſo that the two and the third lye about two leagues aſunder.

Theſe Ilands are much lower then the maine land, ſo that they can hardly bee ſeene

or

or not at all, except you be by the ſhoare, thwart of them you may come neere the ſhoare in ſeven fathom without danger.

Thwart of theſe three Ilands, and Ponnoy, the mouth of the white ſea is at the narroweſt.

About foure leagues thwart off to ſeawards from the three Ilands, in the middeſt of the mouth, lyeth a ſhowld, which is very uneven and ſtony, and at ſome places with low water commeth dry aboue water, it lyeth ſouth & north, firſt north alongſt the coaſt, at laſt northnorthweſt untill thwart of Lombaſcho, but there alongſt it is deepe enough, fifteene, and ſixteen fathom. About ſoutheaſt from Ponnoy it is at the ſhowldeſt ſeven fathom deep. You may alſo ſaile alongſt to the eaſtwards of this ſhowld into the white ſea, but there it is ſhowld water, uneven and very ſhowld. The right fareway is alongſt to the weſtwards of it, and fiue and twentie fathom deep.

Ponnoy is a river where remaineth at low water no more then ten foot water, it floweth there with a ſpring tyde three fathom up and downe, and with an ordinary tyde fifteene foote.

From the three Ilands to the Iland Souſnowits, which men doe call the croſſe Iland, the courſe is ſouthweſt and by ſouth, or as ſome do hold ſouthweſt ten leagues, or from Ponnoy nine leagues. All alongſt this coaſt men may ancker every where in eight and nine fathom, and with contrary windes ſtop the tydes, there goe ſtrong tydes (eſpecially in the ſpring) of the year of an ebbe.

Betweene the three Ilands and the Croſſe Iland lyeth a poynt upon which ſtand alſo three croſſes, one by the other, which men doe miſtake oftentimes for the Croſſe Iland, but it is much ſmaller to ſee to. When you doe get ſight of that point, there ſheweth by it, as if there lay a ſhip before the land with the topmaſts ſtricken. The right Croſſe Iland hath upon the north end two croſſes, and upon the ſouth end three, by all theſe markes they are good to be knowne one from the other.

Behinde the Croſſe Iland you may haue road in 6 or 7 fathom, you may ſail in behind it as well from the northwards as from the ſouthwards, it is there cleane and cleare every where, men do anker, that the great croſſe doe ſtand from them eaſtnortheaſt, there is the right road.

Southeaſt and by ſouth from the three Ilands, and Ponnoy on the Ruſſe ſide, there goeth in the Meſeens golfe, into which commeth a great River, where men may goe up to Kida, and Kolmogro, and alſo another upon which the towne Slowoda lyeth.

Southeaſt from Ponnoy lyeth a little Iland in the mouth of the Meſeens golf, where you may haue roade under for weſterly and ſouthweſt winds.

The ſouth point of this golfe is a low ſand-ſtrand, all growne with trees, there you may alſo ancker alongſt by the ſhore, but cloſe by the land; if you lye ſomewhat off from the ſhoare in nine fathom, there the ground is fowle, from thence alongſt the ſhoare to the Blew point, it is all a faire ſtrand.

CHAP

De Zeecuſten van Laplandt tuſſchen 't Cruys Eylandt en Warſiga en van Ruſlād tot verby de Riviere van Archangel.

Duytſche mylen 15 in een graadt.

Spaanſche mylen 17½ in een graadt.

Engelſen en Fr. mylen 20 in een graadt.

Warſiga

L A

Viſſchers Eylandt

Clooſter

S. Nielaes clooſter

Duina Flu.

Eylanden van Codeſemſke

Binnen hafen

Nofuſeme

Steenrack

Archangel

A P L A N D T

Pelitza

Cruys Eyl.

Catsnoes

Den blaeuwen ofte Groenwen hoeck

RVSSEN

Karretsnes

Musmo

Monies

LANDT.

S. Niclaes

Duyn

Eylandekens voor Podesemske

Biuneu bosch

Visßers huys

Steenrack

Nosuiseme

Vaert na Colmogro

Archangel ofte S. Michiel

De Riviere Dwina vande mont af tot de Stadt Archangel toe.

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CHAPT. VI.

A Description of the Coasts and hauens on the south side of the VVhite sea.

FROM the Crosse Iland to the blue or graye point, the course is southwest twentie leagues. In this fareware in the mouth of the White sea, there goe sometimes verie strong currents, especially in the Spring, through the terrible greate freshuts, of the melting of the snow, which falleth from both sides into the White sea, and runneth through this Strait into the sea, with greate whirling and terrible riplings: It happeneth sometimes that the current runneth there so terrible strong, to the westwardes into the sea, that with a reasonable gale and full sailes, men can doe no more but stemme the tyde, whereof men must be mindefull.

Currents in the mouth of the White sea.

Under the graye pointe men may ancker on the south side, in tenne, eight or seuen fathome, there it is good lying for easterlie windes, a northeast winde commeth from the pointe, the grounde is there reasonable good, but not the cleanest.

Graye point.

From the graye pointe eastwards to the Meseens Golfe the coast is all faire sand strand, with some bancks of two fathome and a halfe, and three fathome alongst the shoare, not farre without the land, where sometimes the current falleth over with greate riplings.

From the blue pointe to the River of Archangell the course is south and by west thirteene leagues. When as you saile so towards the River, you shall then first espie the land a good waies to the westwards of S. Nicholas, it arriseth in a long strake, and then there riseth more land towardes the River, as if it were a rounde Iland, afterwardes you shall see the steeple of S. Nicholas, vvhen that standeth south and by west, and southsouthwest from you, then you are open before the mouth of the river of Archangell.

For to saile into the river of Archangel.

If you vvill saile in there, then bring the steeple of S. Nicholas a shippes length and a halfe, or two shippes lengths to the eastwardes of the Crosse sandhill, keepe them so standing, and saile in right with them, untill that the woode within, come midwaies in the middlemost Podessemske, goe on then southwest and by south, and southwest, for to saile a weather of the taile or shoulde, which shooteth off from the east shoare, when as then the wood within, (that is, the woode upon the northeast pointe of the River) commeth to the southermost of the two vvoods, which stand upon the middlemost Iland of the Podessemske, then you are in the mouth of the channell, right upon the shouldest of the barre, the markes of the east taile are, when the wood commeth halfe waies betwixte the southermost & the midlemost Podessemske, vvhen the pointe of the southermost Podessemske is southsoutheast somewhat southerlye from you, then you are without the pointe of the west grounds, If you bring that pointe not more easterlie from you, you can take no hurte of that pointe. When you are entred the cannell, then goe as is before said, southwest and by south and southwest, untill that the steeple of S. Nicholas come a shippes length bywest the Crosse sandhill, then further take the sounding of the west shoare, and runne in by it, towards the foote strand, and alongst close by it, without going off from it, untill that you come thwarte of the white place, or spot, on the west shoare, aboute the place where it standeth marcked in the carde with A. Edge over then from thence east and by south, and eastsoutheast right to the pointe of the Wood on the east shoare, and on southeast in alongst by the east land, close alongst by the shoare, but thwarte of the two Ilands which lye on the starboarde side, it is a good waies alongst the east shoare somewhat foule and shoulde, wherefore you must take heede: but goe all alongst by the east shoare, untill that you come by the first River on the larboarde side, edge then over againe to the west shoare alongst southsouthwest, untill you come to the bight, there it is shoulde water on the east side.

When you are come in the Bight, then goe on eastsoutheast, and afterwardes east and by south towardes the Stonereach; saile through there amidst the channel, alongst by the buyes, which lye in the middest of the deepe, it is on both sides of the buyes uneuen and rugged.

When as you come against the Stonereach there standeth a Fishers house upon the west shoare, by the little River that runneth into the land, at the north ende, or west ende of the Stonereach, thwarte of that foresaide house lyeth a greate Stone under water, which you may saile about on both sides, it lyeth about the middest of the fareware, as you come sayling on, men saile commonlie aboute to the westwardes of it, all alongst by the west shoare, like as also through the Stonereach, for the west side is deep enough, and at some places somewhat softe grounde, but the east shoare is full of rocks. When as you are past the buyes, then you must keepe off againe, somewhat from the shoare. There was woonte to lye a little Iland at the ende of the Stonereach, but that is of late yeres

Stonereach.

altogether skowred awaie with the Ise. When as you are now through the Stonereach, the course is first southeast, and afterwardes southeast and by south, untill you come into the Bight, then goe on eastsoutheast, and keepe yet to the west shoare, untill that you see the towne of Archangell, then saile right towards it, but avoide the pointe on the larboarde side, for it is foule.

Archangel.

Kolmogro.

For to goe from Archangel further up the River to Kolmogro it is aboute twelue or thirteen leagues, most southeast, but the River runneth upwards with manie crooked Bights.

For to saile out of the River of Archangell, then runne out by the footestrand, and keepe the sounding of the west shoare. When as you beginne to see the steeple of S. Nicholas, then bring it a ships length to the second or middlemost Podessemske, there lyeth a black hommock upon the strand. The north side of the woode within, commeth then over that hommock, then goe on northeast and by north, and northnortheast, towardes the Podesseemkes. When as then the wood within, commeth to the north side of the southermost of the two woods, upon the middlemost Podessemske, then you are upon the shouldest of the Barre, but when the pointe of the southermost Podessemske is southsoutheast somewhat southerly from you, then you are at the ende of all the shouldes, and may goe your course through the sea, where you please, no shouldes shall hinder you.

For to saile out the river.

From the Barre of Podessemske, or from the River of Archangell to the roade of S. Nicholas it is foure leagues. There standeth a beacon at the ende of the Iland, where the English house standeth upon, by west that beackon is the roade for the English shippes, in sixe or seuen fathome, according as they lye neare or farre from the shoare. The English River lyeth in there eastnortheast, and northeast and by east, alongst by the Cloyster of S. Nicholas, but that is so shoulde a river that no ships can goe into it, men must lade them without with Lodges.

S. Nicholas.

English River.

About s.w. & southwest & by west from the barre of the river of Archangel lieth the Salte Iland, upon it standeth a Cloister, & is fast to the main land. The land lieth off from thence to the Cape de Onega, west and by north.

CHAPT. VII.

The Lappish Coasts on the north side of the White sea, from the Crosse Iland, untill past Ombay.

Warsiga.

FRom the Crosse Iland to Warsiga the course is westsouthwest, and west and by south about four & twentie leagues. Warsiga is a village, lying on a river, where is a Sammon Fishing, which lyeth in to the northwardes within the land, you cannot come into the River with shippes, there is no more then eight or nine foote water, but must staye without in the Roade before the River, there is cleane sandgrounde, without anie foule grounde, so that you may ancker there without danger, so neare or farre from the shoare, as you will.

This River men doe knowe (when they saile alongst the coaste, by three high hommocks, which are higher then all the other, and almost of fashion like the three hilles by Bayonne in Galicia, to the northwards of it are white sandhills with trees upon them. Euen by west the three foresaid hommocks goeth in the river.

For to saile from Warsiga to Ombay the course is alongst by the coaste a little west, west and by north, and then westnorthwest, afterwards the most northwest, unto the pointe of Tauria sixe and thirtie or seuen and thirtie leagues. Aboute halfe waies betwixte them, well so neare Warsiga as Tauria lyeth on the coast a high bare hill, thwarte of it and to the westwardes of it lye some bancks, whereof you must take heede.

Point of Touria.

The pointe of Tauria is a high steepe pointe full of trees, to the eastwardes of this pointe the land falleth avvaie into a greate baye farre alongst to the eastwards. About fiue leagues to the eastwards of the pointe of Touria, lyeth a rock, a good waies from land, which is not verie greate, but verie good to be knowen, it sheweth a farre off, as if there sate a greate Ape upon it, this rock the Russes cal Tourie Babbe, that is to say, Grandmother of the point.

Tourie Babbe.

Within that rock in that foresaid baye it is all shoulde water, uneuen and foule ground, where you may not ancker nor haue roade, but to the eastwards of the pointe Tauria you may ancker for westerlie and northerlie windes, somewhat to the northwardes of the pointe in the Bight, there it is shoulde, but by the pointe it is deepe, there you must ancker close by the land.

By

Kandalox

Soete Rivier

Soute Rivier

Ombay

Volua ofte Volua

Kovoda

Versche Rivier

Kemeloe

Soute Rivier

Kielit

Versche Rivier

C O R E L

Duytsche mijlen 15 voor een graedt.

Spaansche mijlen 17½ in een graedt.

Engelsf. en Franf. mijlen 20 in een graedt.

't Weſterſche deel vande Witte Zee
begrijpende de Zeecuſten van
Laplandt van Warſiga verbij Om
baij tot Kandelox en de Cuſte
van Corelia daer tegen over.

L A P

L A N D T

Warſiga

Cascarovia

Witte Zee

C. Kitnyt

I. Soloſki

Zalotitza

A

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By weſt the pointe lyeth the Iland Volna Oſtroue, by the Dutch men called the Reeme Iland. From the pointe Tauria to that Iland the courſe is northnorthweſt two leagues.

Betwixte that Iland and the land of Tauria lyeth alſo a little Iland, betvvixte theſe two Ilands you may (for neede) ſaile through vvith a ſhippe, but it is verie narrowe, at the northeaſt point of Oſtroue is roade in thirtie fathom, then you lye with the ſhippe, (when ſhee lyeth wended to the Iland) in eight fathome, ſo verie ſteepe and riſing is the ground there.

From Volna, Oſtroue or the Reeme Iland to the Gouba (that is the Salte River where men doe lade, lying a halfe league by eaſt Ombay) the courſe is north north eaſt three leagues, which lyeth in north, and north and by eaſt, it is not verie broade, but deepe, at the comming in it is in the middeſt foure and twentie & fiue and twentie fathome, farre within, fiue or ſixe fathome deepe, but there it is foule. Men doe commonly ancker a halfe league within the river, on the eaſt ſide, with an ancker in the middeſt of the river, in ſixteene or eighteene fathome, and with a cable on land, there it is good lying with all windes, except with a ſouth-ſouth-weſt winde, which bloweth there open in.

Aboute a halfe league to the weſtwards of it lyeth the freſh River of Ombay, which is ſo ſhoulde and foule, that men can not goe in there with ſhippes, except they be ſmall, and alſo the Ruſſes are not willing they ſhould come there, for not to ſpoile their Sammon fiſhing, there is greate ſtoare of Sammon caught, which is carried from thence with boats, to the ſhips in the Salt river.

From thence the coaſt lieth ſomewhat alongſt weſtſouthweſt, and then up northweſt to Kandalex.

Thereabouts lye alſo more ladeplaces, where Sammon is caught, as Kierickarick, and Kargapoll, that lyeth ſouthweſt from Ombay, on the Koreels ſide.

CHAPT. VIII.

The Coaſte of Ruſland from the Cape Candenoes eaſtwards to Nova Zembla.

THE Cape Candenoes and Orlogenoes lye northeaſt & ſouthweſt ſeuen and fortie leagues aſunder. The point of Candences is verie good to be knowne, there ſtand fiue greate croſſes upon it for markes. When as you fall with it, you may verie well perceiue, that the land falleth avvaie, on the one ſide to the ſouthweſt, towards the White ſea, and ſouth-eaſt on the other ſide.

Aboute thirteene leagues to the eaſtwards of the Cape de Candenoes lyeth an Iland called Morſonowits, to the eaſtwardes of it goeth a greate Bay into the land, but it is verie ſhoulde water, with manie ſhouldes and Dwalegrounds. It hath heretofore happened, that ſome ſhips haue beene here loſt, thinking that they ranne into the mouth of the White ſea, for it agreeth verie neare with the courſe, and alſo with the height of the White ſea, but it is good to know by the land, and to diſcern one from the other, for the Ruſſe coaſte to the eaſtwards of Candenoes is altogether a land with Sandhils, and a flat ſtrand, but the Coaſte of Lapland is high and hillie. In this Bay goeth a River through the land, where you can come through with Lodges into the White ſea.

Thwarte of this Baye, aboute ſixe and twentie leagues eaſt, and eaſt and by ſouth from Candenoes lyeth the Iland of Calgoya, being thirteene leagues long, you may ſaile rounde aboute it, but upon the ſouth ſide runneth a greate riffe alongſt the land: they that come from the eaſtwards muſt avoide it, for it is fait to the weſt ende of the Iland. Upon this Iland are greate ſtore of Geeſe, which in the Sommer are altogether bare, or naked, without anie feathers, which ſit and broode upon one egge, which they haue lying under them, and ſo do hatch their young one, which are there in ſuch aboundance, that the Ruſſes doe come there a ſhoare with their Lodges, and laye a deale or boarde upon the land, and driue the Geeſe with ſtaues, into theire boats or Lodges, in ſuch aboundance, that they ſalte them into Barels, in greate aboundance.

From Candenoes to the Iland Tuſſara it is eaſtſoutheaſt two and fortie leagues: betwixt them both goeth in the foreſaide Bay. Byweſt Tuſſara lyeth the point of Swelgenoes.

From Tuſſara to the River of Colcova the courſe is eaſt ſeuen leagues, which is a good river, being twelue foote deepe, but there is no other trade, but that the Ruſſes doe come there from Colmogro and S. Nicholas with Lodges, for to trade there, and to barter

theire wares there for Skinnes and other wares.

Pitsana. Seuen leagues to the eastwardes of the River of Colcova lyeth the River of Pitsana, there is but sixe foote water, and is an unknowne place, but a little to the westwardes of it, lyeth a shoulde, which you must avoide: Olliver Brunell in his voyage from Nova Zembla came on ground there.

Pitsora. Aboute thirteene leagues to the eastwards of Pitsana lieth the River of Pitsora, which lyeth in southsoutheast by the easte pointe, and hath twelue foote water, the land is there low with Sandhills, and upon the west side standeth a Packhouse, with some crosses. When you come within the River, you must edge up westwards towardes the Packhouse, and ancker there in three and foure fathome, there is a greate Haff, or broade water. You must avoide the east side of the River, which is full of Sands and bancks. The little towne of Pitsora lyeth aboute fiue and thirtie leagues within the land, there is greate aboundance of costly Skinnes and Christal.

Oltgyn. Betvvixt Pitsora and Waygats lieth Oltgyn, and vvithout the land lye two rockes or little Ilands, the one called Orangien, and the other Graue Maurice, you may ancker under them in sixe or seuen fathome. From the southermost shooteth off a little riffe, but you may founde it well in three fathome.

To the eastwardes and to the westwardes of these two little Ilands is a greate Baye, where it is shoulde water, the land runneth there round to the pointe of Pitsora, all alongst in a Baye off from Pitsora unto the Waygats. It is from Pitsora to Waygats northeast and by east, two and thirtie leagues.

Waygats. Waygats, which is also called the Straite of Nassowe, is a Straite where men may saile through into the Tartarish sea, it lyeth in first about east, afterwards northeast through about eight or nine leagues, aboute halfe waies through lyeth an Iland, which you may saile aboute on both sides. A little within the point, Traynebay. on the north side is a faire Baye, which you may saile into so deepe as you wil, in fiue, foure and three fathom, good sticking ground, alongst by the east shoare is the deepest water, there you shall lye sheltered for all windes and Ise-drifts.

Through this narrowe or Straite, hath been divers times attempted, or undertaken, for to discover, and to finde a waie, for to passe alongst to the northwards of Tartaria, unto the rich Kingdomes of Cathay and China, and so forth to the Molucques, but in vaine, becawse of the terrible Ise that remaineth there the whole yeare through, and can never melt, by reason of the continuall cold.

From the east ende of the Straite Waygats to the Baye of Oby it is eastsoutheast, & south- Oby. east and by east fortie leagues. To the eastwardes of it that land lieth forth northeast fortie leagues more, to the two norther Rivers, and then yet so forth alongst northeast, but how far is yet unknowen.

The West coast of Nova Zembla lyeth to the Nova Zembla. northwards off from Waygats to Costintsarck northwest aboute three and fiftie leagues. To the northwardes of it the land falleth awaie, aboute north and by east to the pointe of Langenes, or the States pointe, further northnortheast, northeast, and eastnortheast to the Ilands of Orangien, the northermost parte of Nova Zembla, in the heigth of 77 degrees and an half.

Of the tydes and course of the streames.

AT the North Cape a southwest moone maketh high water.

Thwarte of the Tanebay a southwest moone maketh high water.

At Wardhouse a southwest moone maketh high water.

At Kilduyn an eastsoutheast moone maketh the higheste water.

At the Seuen Ilands a southeast moone maketh high water.

At Swetenoes a south and north Moone maketh high water.

Alongst this coaste to the eastwardes of the North cape the Flouds come out of the Northwest and northnorthwest, and runne so alongst the coasts of Lapland, unto Orlogonose.

At the three Ilands a southwest and northeast Moone maketh high water.

At Katsnoes pointe an east and west moone maketh the higheste water.

Before Podessemske and S. Nicholas an east and by south, and west and by north moone maketh the higheste water.

At the Iland of Nova Zembla a southeast moone maketh high water.

From Orlogenes and the Three Ilands the floud falleth into the mouth of the White sea, towardes the graye pointe of Catsnoes aboute southsouthwest and southwest and by west.

But aboute the pointe of Catsnoes the floud falleth into the White sea, partly towards Warsiga and Ombay, and also towardes the Podessemske and S. Nicholas.

To the eastwardes of Candenoes, towardes the Iland of Colgoyen, the floud falleth east, & east and by south, as also alongst the same Iland, & from Colgoyen towardes the Waygats the Tyde falleth east and west. Alongst Nova Zembla the tydes turne about with the moone, alongst

alongſt Ruſland they come oute of the weſt and weſtnorthweſt, betwixt Candenoes and Pitſora, and fall ſo alongſt Ruſland.

The flouds towardes Waygats come from Colgoyen and Nova Zembla, and fall together eaſt and by north through the Strayte of Waygats towards the River of Obye, ſo that the ebbs and flouds doe keepe open the channels of Waygats, that they are oftentimes without Iſe, or at leaſt but with Iſe that driues in Schooles.

But to the eaſtwardes of the Waygats the flouds come out of the northeaſt, and fall ſo into the Obye, and into the Straite of Naſſowe, there the water riſeth and falleth, but keepeth no certaine tyde.

Of the depths and grounds both to the eaſtwards and weſtwards of Waygats.

ALL the coaſt alongſt off from Candenoes unto Waygats, men do finde a flatt ryſing grounde, the moſt parte ſand and ſofte grounde, he that muſt ſaile there in miſtie weather, muſt knowe that in eight or nine fathom depth he is foure or fiue leagues from the coaſt, but when it is 30, 35 or 40 fathome, then he is farre enough from the land. So it is alſo alongſt Nova Zembla, and alſo over the eaſt ſide of Waygats, but when you come before the Strait it will be ſhoulder by little and little.

How theſe lands doe lye one from the other, and from other lands.

From the North Cape to the North kyne eaſt and by ſouth — 13 leagues.
From the Northkyn to the Tanebay eaſtſoutheaſt — — 10 leagues.
From the Tanebay or Matkorf to Wardhouſe ſoutheaſt and by eaſt, ſoutheaſt, and ſoutheaſt and by ſouth — 16 leagues.
From Wardhouſe to the pointe of Kegor ſoutheaſt, and ſoutheaſt and by ſouth 10 leagues.
From Kegor to Laus ſoutheaſt and by ſouth eaſterlie — — 9 or 10 leagues.
From Laus to the River of Kool ſouth and by eaſt and ſouthſoutheaſt — 10 leagues.
From Laus to Kilduyn ſoutheaſt and by ſouth eaſterlie — — 10 leagues.
Frō Kilduyn to the point of Tierrebirry ſoutheaſt and ſoutheaſt and by eaſt 5 leagues.
From the point Tierrebirry to the Seuen Ilands ſoutheaſt and by ſouth — 13 leagues.
From Tierrebirry to Swetenoes the coaſt lyeth ſoutheaſt and by ſouth — 40 leagues.
From Swetenoes until three leagues paſt Lombaſcho ſouthſoutheaſt — 16 leagues,
From thence to Orlogenoes ſouth 9 leagues.
From Orlogenoes to the three Ilands ſouth 3 l.
From the three Ilands to Ponnoy ſouthweſt & by ſouth — — 3 leagues.
From the three Ilands to the Croſſe Iland Souſnowits ſouthweſt — 20 leagues.
From the Croſſe Iland to Catſnoes, or the gray point ſouthweſt — — 20 leagues.
From the Gray pointe to the River of Archangell ſouth and by weſt — 13 leagues.
From the Barre of Archangell to the ſalte Iland ſouthweſt ſomewhat weſterlie 7 leagues.
From the Salte Iland to the C. Onega weſt, and weſt and by north — 17 or 18 leagues.
From the Cape Onega to the Ilands Solofky northweſt and by weſt — 20 leagues.
From the Croſſe Iland to Warſiga weſtſouthweſt, and weſt and by ſouth 24 leagues.
From Warſiga unto the pointe of Touria weſt, weſt and by north, weſtnorthweſt, & northweſt — — 37 leagues.
From the pointe of Tauria to Volna Oſtrove northnorthweſt — 2 leagues.
From Volna Oſtrove to the Gouba to the eaſtwards of Ombay northnortheaſt 3 leagues.
From Ombay to Kandalex n.w. & by w. 13 le.
From Orlogenes to the C. de Candenoes the courſe is northeaſt — 47 leagues.
From Candenoes to the Iland Colgoye eaſt and by ſouth — — 26 leagues.
From Candenoes to Swelgenoes ſoutheaſt and by eaſt — — 29 leagues.
From Candenoes to the Iland Morſonowits ſoutheaſt — — 13 leagues.
From Candenoes to Tuſſara it is eaſtſoutheaſt — — — 43 leagues.
From Tuſſara to Colcova it is eaſt 7 leagues.
From Colcova to Pitſana eaſt and by north — — — 7 leagues.
From Pitſana to Pitſora eaſt and eaſt and by north — — 13 leagues.
From Pitſora to Waygats the courſe is aboute northeaſt and by eaſt 14 or 16 leagues.
From Catſnoes to the Ilands of Solofky weſt or ſomewhat more ſoutherly 37 leagues.
From Catſnoes to Warſiga northweſt and by weſt — 16 or 17 leagues.
From Catſnoes to Polongi northweſt and by north — — 23 leagues.
From the Ilands of Solofky to Ombay in Lapland north — 32 or 33 leagues.
From Solofky to Warſiga eaſtnortheaſt 32 leag.
From Solofky to Polongi northeaſt and by eaſt — — — 50 leagues.
From Candenoes to Coſtintſarck in Nova Zembla northeaſt & by eaſt about 60 leagues.
From the eaſt ende of Colgoyen to Waygats eaſt — — 60 leagues.
From Pitſora to the eaſt ende of Colgoyen weſtnorthweſt — — 43 leagues.

Heigths of theſe lands.

THE Iland Kilduyn lieth in 69 degrees and 40 minutes,

The point of Catſnoſe or the Graye point lyeth in 65 degrees.

S. Nicholas or the River of Archangell in 64 degrees 30 minutes.

The Ilands of Solofky in 65 degrees.

Ombay in 66 degrees 45 minutes.

Cape Candenoes in 69 degrees 30 minutes.

The Iland Colgoya in 69 degrees 10 minutes.

The Rivers of Colgova, Pitſana, and Pitſora lye in 68 degrees 30 minutes.

Waygats or the Straite of Naſſow lyeth in 69 degrees 40 minutes.

The ende of the ſixth Booke.

To the Bookbinder.

Place the Cardes thus.

Numb. 49, & 50,		before fol.	153.
51 & 51½,	—	—	157.
52,	—	—	161.
53,	—	—	165.
54,	—	—	167.
55,	—	—	169.
56,	—	—	171.

The third parts

FIRST BOOKE

of the

SEA-MIRROVR

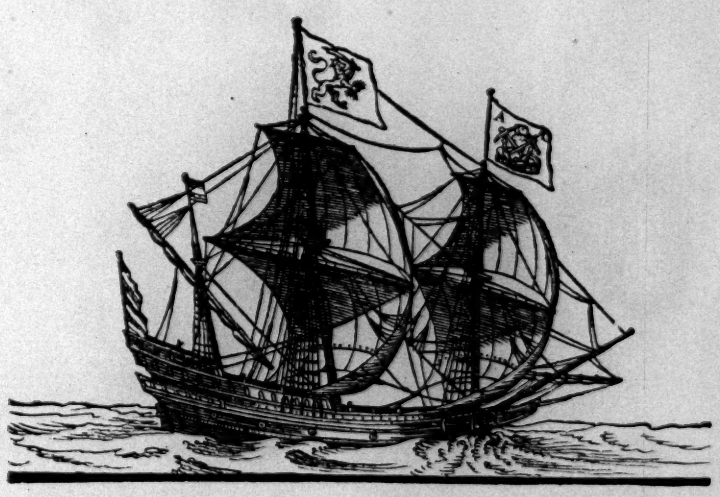
of the Weſterne and Southerne

NAVIGATION.

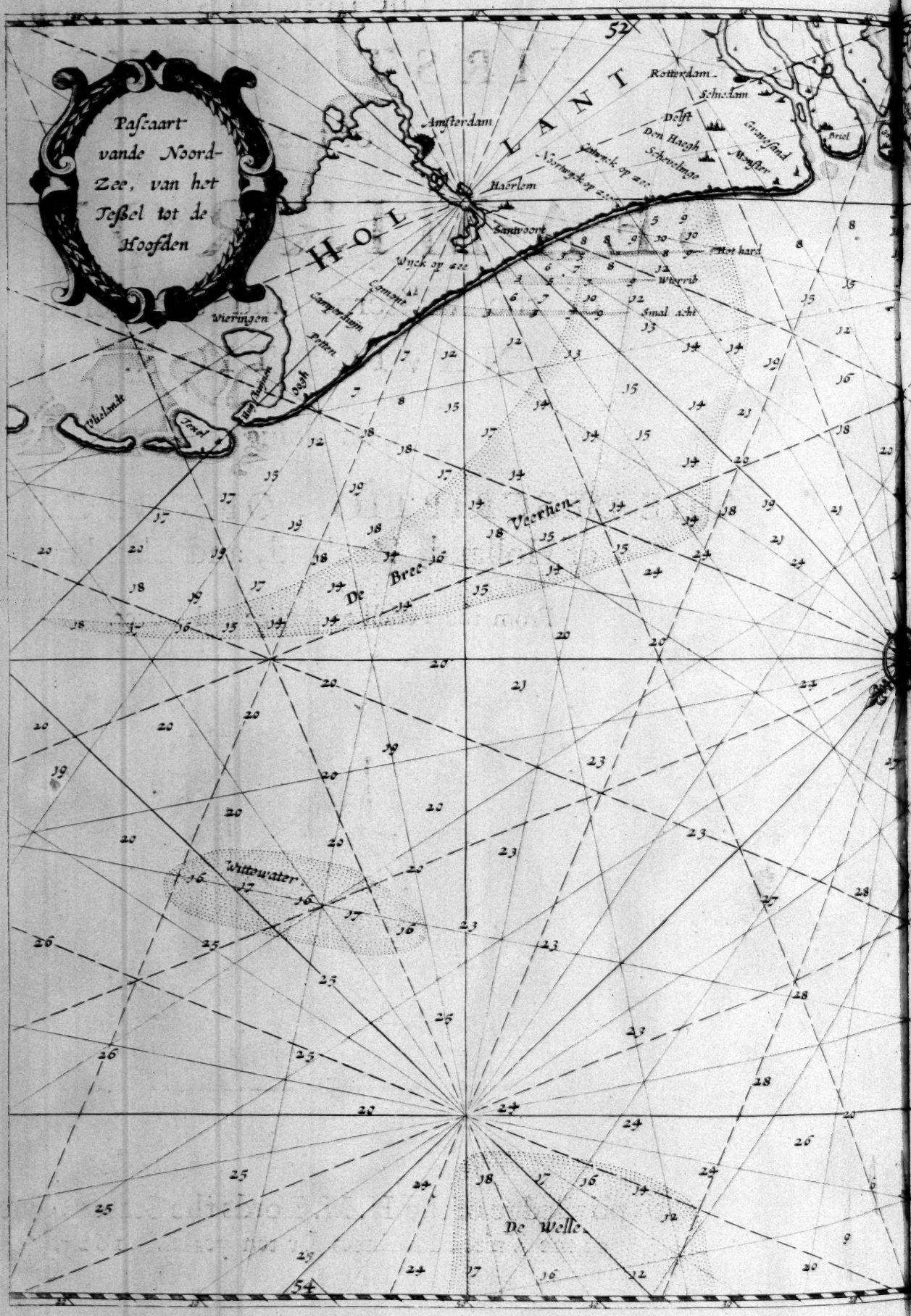
Containing

THE DESCRIPTION OF THE COASTS of Holland, Zealand, and Flanders,

From the Teſſell to Callice and Dover.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.


Paszaart
vande Noord-
Zee, van het
Teßel tot de
Hoofden
HOLLANT
Amsterdam
Rotterdam
Schiedam
Delft
Den Haegh
Schevelinge
Monster
Haerlem
Zantvoort
Wyck op zee
Vlieringen
Terschelling
Pollen
Texel
Vlieland
Het hard
Wieringh
Smal acht
Veerhen
De Bree
Witte water
De Welle
52
54

Met Prwilegie der E.E.H.M. Heeren Staten generael voor thien jaren.

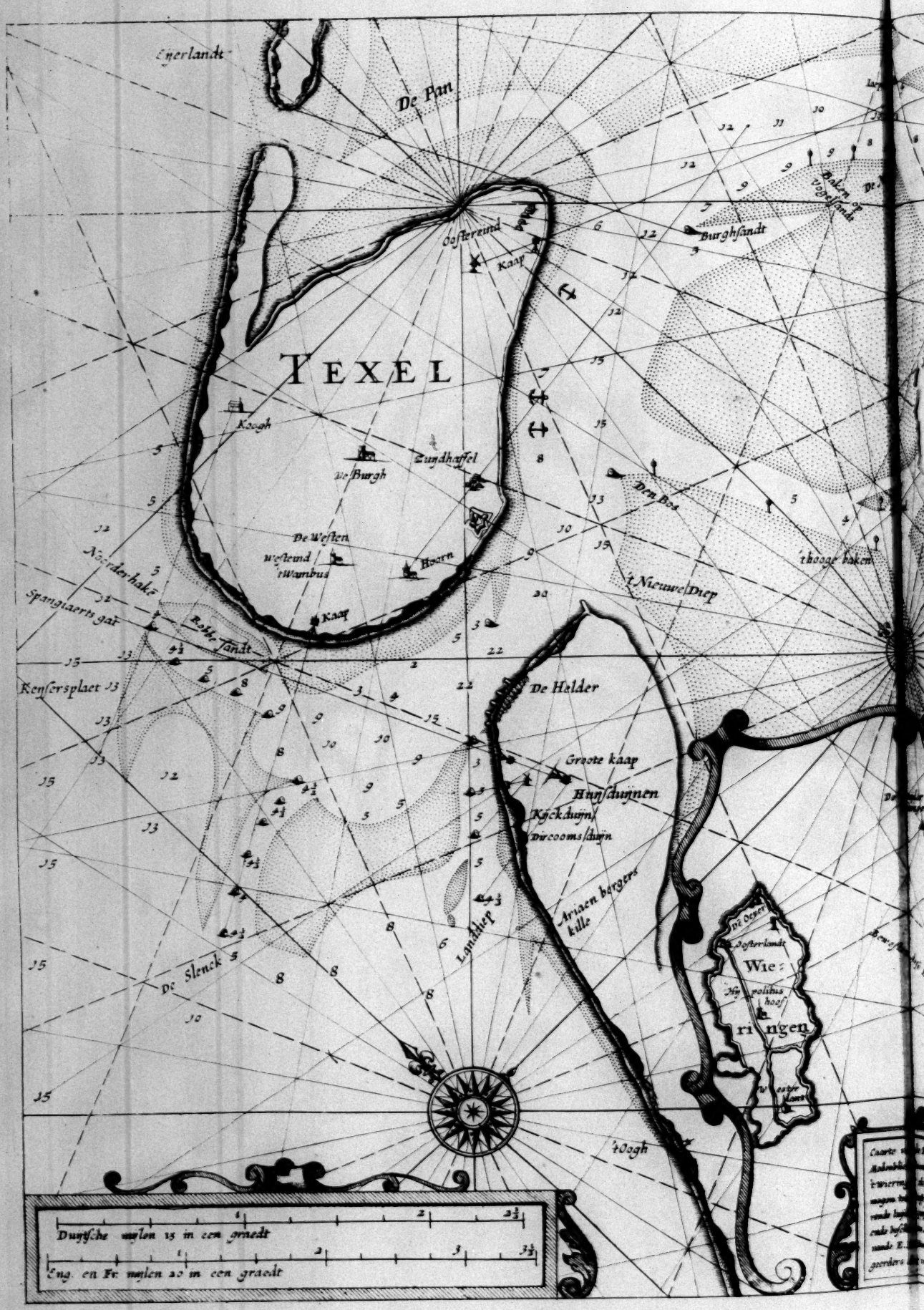
VLAENDEREN.

ENGELANT.

Sluys
Brugge
Heyst
Blanckenbergh
Oostende
Nieuport
Middelborgh
Walcherē
Dunkercken
Grevelingen
Cales
Goeyng
Duins
Duynen
Sueres
Sandwich
Voorlandt
Boeckelwers
Schapen
D'Muys
Goodwin sand
Goersher
Knock
Re-Nes
Blacktel
Yermse fhe
Orfordhoofd
Gelderegh
Dunmunts
Walderswyck
Sowels
Kaffy
Colchester
Leistaf
Larmuyen
Winterthon
Admiraels huys
Hasbergh
Crommer

Duytsche mylen 15 in een graedt
Spaensche mylen 17½ in een graedt
Eng: en Fr mylen 20 in een graedt

57


Engerlandt
De Pan
Oosterend
Kaap
TEXEL
Burghsandt
Koogh
De Burgh
Zundhaffel
Den Hoorn
De Westen
't Westend
't Wambuis
Hoorn
Kaap
Noorderhaak
Spanjaerts gat
Rotte Tandt
Kenssersplaet
't Nieuwe Diep
thooge haken
De Helder
Groote kaap
Hunsdunnen
Kyckduyn
Dircooms duyn
Arjaen burgers kille
De Slenck
Lyndiep
Oosterlandt
Wie
ringen
Duytsche mylen 15 in een graedt
Eng. en Fr. mylen 20 in een graedt

De Teßelstroom met de Gaten van't Marsdiep.

Met Priwlegie der Ed. H.M. Heeren Staten generael voor thien jaren.

Breesandt

Breesandt

Munnicke sandt

Noorder ton

Middelton

Zuyderton

De Vlieter

Drnstal

Den Oever

Caep

Oostlander kerck

Wieringen

Stru

Cleverstue

Ypels Hoof

westlander kerck

Medenblick

Oprerdoes

Twisck

Baken op de Kreupel

Ton op de Kreupel

De drystal

De unterste ton van't Noorder gat

Kreupelsandt

De Kille

Geldersche hoeck

Enchuysen

Broecken aert

Boert huysen beoosten werverts hoof

Groote Broeck een hooge Spitse toren

werverts hoof

Lutke Broeck een klein Spits toorentien

De 8 waermorolens beoosten Medenblick

Almerdorp Sonder toren

Oprerdoes

Twisck

Hem een hooge Spitse toren

58

THI

THIRD PART of the SEA-MIRROVR

Containing

A DESCRIPTION OF THE Seacoasts of the Westerne Navigation;

COLLECTED AND COMPILED TOGETHER

Out of the Discoveries of many skilfull and expert Sea-men,

BY

WILLIAM IOHNSON BLAEUW;

And Translated out of *Dutch* into *English*, by

RICHARD HYNMERS.

AMSTERDAM,

Printed by WILLIAM IOHNSON BLAEVW, dvvelling upon the Water, by the Old Bridge, at the Signe of the Golden Sunne-Dyall. 1625.

Cum Privilegio.

THE FIRST BOOKE of the VVESTERNE NAVIGATION,

Containing the Deſcription of the coaſtes of Holland, Zealand, and Flanders, from the Teſſell to Calice and Dover.

CHAPTER. I.

Of the Teſſell ſtreame, and of the Channels of the Teſſell.

HOW men ſhall ſaile from Amſterdam to Vrck (about Enchuyſer ſand) and from Enchuyſen to the Crippell and Creyl, is deſcribed in the firſt chapter of the firſt booke of the Eaſterne navigation.

Markes of the beacon upō Cripplesand.

From the buye upon the Crippel, (which lyeth upon the East end of the Cripple-ſand in three fathom) unto the beacon upon Cripple-ſand, the courſe is northweſt and by weſt, and northweſt. When Lutkebrooke, a ſmall ſpire ſteeple commeth to Hem (which is alſo a ſpire ſteeple) then are you thwart of that beacon. From the beakon upon the Cripple, unto the ſouther buye upon Wieringher flat, the courſe is northweſt and by weſt, or weſt-northweſt, according as the winde and tyde ſhall be, it lyeth at high water with an ordinary tyde, in thirteen foot and a halfe, the

Markes of the ſouther buye upon the flat.

markes thereof are theſe: Grootebrooke commeth betwixt two Hay-ſtacks, to the eaſtwards of the fiue water-mils which ſtand to the eaſtwards of Warvers hoof, that is a longſt mark in the South. Twiſch a ſharpe ſteeple to the weſtwards of Medenblick, commeth over Almerdorp, there was wont to be a little flat ſteeple, but it is fallen downe, and therefore now not ſo good to be knowne, that was a right thwart mark. Vpon Wieringhen ſtandeth a cape, bring Eaſtlander ſteeple, which is a flat ſteeple upon Wieringhen, right over the cape, and ſaile ſo right with it, and you ſhall come right with the buye. When you are at the buye, Weſtlander Church commeth then over Cleverſtee, and the eight milles to the eaſtwards of Medenblick, a little without the Bulwarke of the towne. For to finde the deepeſt of the Flat comming from the Cripple, you muſt be carefull to look out for the foreſayd markes. If that Twiſch come firſt to Almerdorp, before Cleverſtee come to Weſtlander Church, then you are too neere to Bree ſand, or the grounds on the ſtarboord ſide, theſe are ſure marks for to ſaile over the Flats, when there lye no buyes. Alongſt to the eaſtwards of the buye is the deepeſt water. If you will ancker before the VVieringher Flat, then come no neerer the Flat then vvhen Twiſch commeth a little to the weſtwards of Opperdoes, or halfe wayes betwixt Opperdoes and Almerdorp.

For to ſaile over the Gammels to Medenblyck.

For to ſaile from the foreſaid ſouther buye over the Gammels to Medenblick, you muſt bring the weſtermoſt water-mill of the eight (which ſtand to the eaſtwards of Medenblick) a capſtone barres length without or to the eaſtwards of the Bulwark of the towne, and ſaile then boldly without feare right in with them, untill that you come into the road where the ſhips commonly lye, or els, if you deſire to goe into the haven, then ſaile in right to the norther head, there is nothing that can hurt you. But if you muſt turn to windwards over the Gammels, and that your ſhippe draweth more then eleven foot water, then runne not further over to the weſtwards, then that the foreſayd water-mill commeth almoſt within, or a handſpikes length to the foreſayd Bulwark, ſo that you may yet well ſee through betwixt them, then caſt about, and run over to the eaſtwards, ſo long untill Grootebroeck come in the fiue watermilles, which ſtand to the eaſtwards of VVarmerſhoof, or on to the eaſtwards of them, ſo you ſhall not doe amiſſe, for it is there broad and wide.

If you deſire to ſaile over the Gammels to Medenblick, when you come from the Flye, then bring the ſteeple of Opperdoes over the weſtermoſt water-mill of fiue which ſtand to the weſtwards of Medenblick, and runne in ſo right with them, untill that the weſtermoſt

water-mill of eight (to the eaſtwards of Medenblick) come to ſtand a capſtone barres length without the Bulwark, as here before once already hath been ſayd. Having theſe markes thus, and that it doe become darke, then goe on ſouth and ſouth and by eaſt, according as the wind and tyde ſhall be, and you ſhall not doe amiſſe, neither ſhall you miſſe the town. In this foreſayd faire way, there is no leſſe depth then upon the Wieringher flat, and all ſoft ground.

VVhen the ſteeple of Twiſck is over the weſtermoſt water-mill except one of the fiue which ſtand to the weſtwards of Medenblick, and Grootebroeck, in the little village, to the eaſtwards of the fiue water-milles on the Eaſterdyke, then are you in thirteen foot from the northweſt poynt of the Cripple, and paſt the tayle of the Cripple. Vpon theſe foreſayd markes, and thirteen foot, lyeth a buye with three legges, and on the foreſayd weſt ſhore lye three drif-beacons in twelue foot, and then commeth the weſtermoſt water-mill (of the eight which ſtand to the eaſtwards of Medenblick) about a handſpikes length from the Bulwark of the towne. Then for to haue the deepeſt water, and to goe ſure, governe your ſelfe according to the foreſayd markes, to wit, of Opperdoes ſteeple over the weſtermoſt water-mill of them which ſtand to the weſtwards of Medenblick, and ſo you ſhall not haue leſſe water then upon the Wieringher Flat.

For to ſaile over the Wieringhē Flat.

From the Souther buye to the ſecond or middle buye, the courſe is northweſt, and northweſt and by north: but for to finde the deepeſt water, go firſt northweſt ſo long until that Ypelshoofs Church come over the water-mill which is called the Bolmill, and then forth northweſt and by north. VVhen the Cornmill upon VVieringhen commeth in the ſwamp of the Oever, then you haue the length of the ſecond buye, which lyeth upon the weſt, or the ſouth end of a little plate called the Repell, the faire way is alongſt to the weſtwards of it, there being at low water two fathom large, and at high water ſcarce three fathom deep. On the weſt ſide of the faire way, betwixt the ſouther buye, and the middle buye, neereſt the middle buye, lieth a hard ſand, called the Sow, or the old Sow, which on the eaſt ſide is very ſteepe and needle to, which (in ſayling up) men might ſayle vvithin a poynt or rayle of it: to the vveſtwards of it ſhooteth off another taile to the northwards, a great wayes towards the northeaſt buye. Vpon the outermoſt, or northermoſt poynt, called Seughoort, ſtandeth alwayes a beacon. Vpon Wieringher upon the Oever ſtand two little capes with barrels on them, the one upon the northend of the Oever, and the other upon the head, they are ſo little, that you can hardly ſee them: when you come off from the Souther buye towards the middle buye, then keep them not one in the other, for if you keep them one in the other, then you will be very cloſe to the ſouth ſhore, and ſhall but even run cleare of the old Sow, but keep the ſouthermoſt a little to the weſtwards of the northermoſt, and then you ſhall runne alongſt the right fare way, and ſhall not take any hurt of the old Sow. When you come neere the middle buye, you muſt leaue theſe markes, and uſe them then no longer.

From the middle buye unto the norther buye, the courſe is northnorthweſt; when you come thwart of the norther buye, then commeth Ooſtlander Church and the Cornmill, both over a little chappell covered with red tyles, that ſtandes upon the Oever, thwart of it alſo ſtandeth the foreſayd beacon upon Seughoort. By the norther buye it is ſcarce three fathom deepe at high water, the fare way is alongſt to the weſtwards of it. When you come by the norther buye, keepe ſtill the foreſayd northnorthweſt courſe, untill that Ooſtlander Church come to the northwards of the Sedge-dyke of the Oever, and then you are paſt the little plate vvhich lyeth by the norther buye.

When as that Ooſtlander Church commeth from the Sedgedyke, goe then north, and north and by eaſt on, to the Neſſe. In that fare way it is broad and wide, the weſt ſhore all alongſt unto the Neſſe, is very flat, there you cannot take any hurt, but may boldly runne alongſt by it, although it were a lee ſhore, but the eaſt ſhore is ſteepe, eſpecially ſomewhat further out towards Iaepvaer. When the great cape upon Wieringhen ſtandeth a great ſhippes length to the eaſtwards of the houſes upon the Oever, then you are well to way, and right in the fare way, betwixt the norther buye and the Neſſe. When Ypelshoof and Stru are one in the other, there is the roade, where men do lade and unlade, you may anckor thereabouts in the mideſt of the fareway in foure fathom, the neerer the eaſt ſhore the deeper. Iaepvaer is a taile of ſand or plate faſt to the eaſt ſhore, which you might ſaile within when you ſaile off, but ſpecially in ſayling upwards in 6 or 7 fathom, upon it lyeth a black buye. Vpon the poynt of the Neſſe over againſt Iaepvaer lyes a white buye, theſe lye both in three fathom, or three fathom and a halfe. In the winter, when the buyes are taken away, then in place of the white buye there is ſet a beacon upon the Neſſe.

The Neſſe.

Iaepvaer.

Voghelſand. Neſſe. From the Neſſe to Vogelſand, the courſe is moſt northweſt, therefore when you haue gotten the length of the buye or the beacon upon the Neſſe, goe then more weſterly, northnorthweſt, and northweſt and by north, and northweſt, unto the beacon upon Vogelſand, the vveſt ſhore you may ſound in ſixe and ſeven fathom. The markes of this reach are theſe, the mill of Ooſterend (which is a litle village upon the eaſt end of Teſſell) and the cape which ſtandeth upon the dyke, one in the other, then are you amidſt the chanell in the deep, that is, 10, 11, & 12 fathom: when the mill ſtandeth ſomewhat to the ſouthwards, or to the weſtwards of the cape, then you are by the ſouth ſhore, which is very ſteepe, which (in turning to windwards) you may not come nearer then in 8 or 9 fathō, but being paſt Vogelſand, it groweth ſhowlder, & the eaſt ſhore very ſteepe. As ſoon as you find that it beginneth to ſhowld, you muſt caſt about, els you ſhould preſently be on againſt the eaſt ſhore.

From the beacon upon Vogelſand, the courſe is weſtnorthweſt unto the buye upon Burgſand. Burgſand, which lyeth upon the taile of the Share, the marks of it are: the Eyerland even unto the eaſt poynt of the Iland Teſſell, and the Church of the Horne upon Teſſell to Zuydhaffell, which is a few houſes to the northwards of the Schonce. Or els when you come about Vogelſand, then keepe the foreſaid cape and mill one in the other, untill that the foreſayd Hoorn come to, or through Zuydhaffell, and then run on, keeping them ſo; when that Eyerland then cometh even to the eaſt poynt of Teſſell, then you haue the length of the buye upon the Burgſand, you may bring the Hoorn vvell ſomewhat to the northwards of Zuydhaffell, but in no wiſe to the ſouthwards of it, for els you ſhould ſaile on againſt the ſouth ſhore. For to ſaile from Copevaerders road. thence to Copevaerders roade, you muſt keep the Hoorn to Zuydhaffell, and ſaile forth keeping them ſo, untill you come againſt Teſſell in the roade, & anckor there where you think good. Before Oſterend it is beſt for ſmal ſhips, there it is ſhowld water, and there goeth little tyde, but moſt ſhippes doe anckor before the Geeſt.

The Bos. Vpon the poynt of the Bos lyeth a white buye in 3 fathom on the vveſt poynt of the Balgh, which you muſt leaue on the ſtarboord ſide, and run about to the eaſtwards of it into the Balgh, and then forth alongſt by the beacons to Wieringhen, you muſt leaue all the beacons alſo on the ſtarboord ſide.

For to ſaile out at Teſſell. For to ſaile from the Copevaerders road out at the Teſſel, you muſt goe firſt ſouthweſt or ſomwhat weſterly to the Helder, or runne alongſt by the Teſſell ſide in 9 or 10 fathom, until you come neare the Helder, and then go out vveſt cloſe alongſt by the ſhore of the Helder, and by little and little ſomewhat more northerly, untill that the capes upon Huyſdowne be one in the other, or that the greateſt come through the ſmalleſt, to wit, to the weſtwards of it, and then goe out n.n. w. or more northerly or weſterly, according as the winde or tyde ſhall be, untill you come againſt the north ſhore in 5 or 6 fathom, and run boldly out alongſt by it, until you be clear out at ſea.

When the tower of Weſteynd (which men doe name the Weſten, or the Wambus) commeth to be e.n.e. from you, or a little more eaſterly, then you haue the length of Cape & ſteeples buye, that is, the innermoſt buye of the Spaniards channell, vvhich you ſhall eſpie on the larbord ſide. To the northward of it lie three other buyes, all along the eaſt ſide of the Keyſers-plate, neare upon one courſe, (to wit, n. n. w. or a litle more northerly) vvhich you muſt leaue (in ſailing out) all on the larboord ſide. The outermoſt buye lieth from the fourth, north ſomewhat eaſterly upon the poynt of the Keyſers-plate, in 22 foote at low vvater, you may runne alongſt to the vveſtwards of it, but not farre, for the Keyſers plate is on the eaſt ſide unto the outermoſt end very ſteepe, but the eaſt ſhore of the deepe is flat. When you come thwart of the foreſaid outermoſt buye, then lyeth the Kooger Church right e.n. e. from you, and the capes upon Huyſdown are one in the other.

For to find the Spaniards chanell comming from the northwards, you muſt bring the capes upon Huyſdowne one in the other, or a little through one another, to wit, the Runner that is the ſouthermoſt and greateſt, a little to the eaſtwards of the other, then they ſhall ſtand ſ. ſ. e. from you, ſaile then right in with them, keeping them ſo, & you ſhall ſaile right upon the outermoſt buye, or in ſight of it, which lieth (as is ſaid) upon the point of the Keyſers plate in 22 foote at low water: when you come to the buye, the Koger church ſhall lie due e.n.e. from you. Therfore if you come from the weſtwards or the ſouthwards, then bring that church not more northerly then e.n.e. but rather a litle more eaſterly frō you, and ſaile then right in with it, untill that the capes come one right againſt another, or elſe you ſhould lightlie fall upon the Keiſers plate, which is without upon the north ſide very ſteep. Men may run alongſt to the weſtwards of the outermoſt buye, but not farre: alongſt to the eaſtwards of it, it is broader and wider. From the firſt or the outermoſt buye, to the ſecond, the courſe is ſouth ſomewhat

For to ſaile in at the Spaniards channell.

weſterly, and from thence to the third, fourth, and fifth, which is the buye of Cape and ſteeple, it is almoſt one courſe ſouthſoutheaſt, or ſomewhat ſoutherly, the buyes lye all on the weſt ſhore, men may for need ſaile alongſt to the weſtward of them, but not farre, for the weſt ſhore is ſo ſteepe, that if a great ſhippe ſhould lye with the ſtemme againſt it, there ſhould be a head no more then three foote, and by the maine maſt at leaſt three fathom deepe, but the eaſt ſhore is flat, men may run alongſt by it upon their lead, untill they come within the buyes. The buye upon the taile, that is, the innermoſt buye of the Slenk, lyeth from the buye upon Cape and ſteeple, ſouth and by weſt, and ſouthſouthweſt, but the Helder ſoutheaſt. Men may ſaile from the buye upon Cape and ſteeple, right with the Helder, without danger, or to the buye upon the taile, and from thence alongſt by the ſouth ſhore, which is alſo very ſteepe, or right to the Helder, according as ſhall be beſt convenient for the wind and tide.

The falling of the tide. The fore-flood falleth very ſtrong over the ſouth ground northnortheaſt to the Spaniards channell, untill halfe flood, and the fore-ebbe to the contrary ſouthſoutheaſt, untill halfe ebbe. The Helder lyeth from the buye upon the taile, eaſtſoutheaſt, and ſoutheaſt and by eaſt. When you are come neere the Helder, runne cloſe alongſt by it, for to avoyd a taile which ſhooteth off from Geeſt ſand, which you might ſail within when you come in out of the ſea, there lyeth a buye upon it, which you muſt leaue on the Larboord ſide. Being paſt the Helder, goe northeaſt, or ſomewhat more caſterly, or alongſt by the Teſſels ſide in eight or nine fathom, unto the Copevaerders road, the Wieringhen ſide is ſteepe.

The Slenk. In the Slenk lye ſixe buyes, the innermoſt lyeth upon the taile of the Keyſers plaet, weſtnorthweſt from the Helder. For to ſaile out at the Slenk, you muſt runne alongſt to the ſouthwards of it, and leaue it on the ſtarboord ſide, and goe out weſt, and weſt and by ſouth, to the ſecond and third buye, from the third to the fourth and fifth weſtſouthweſt, the ſixth or outermoſt lyeth a little more ſoutherly.

For to finde the Slenck comming in out of the ſea, then bring the Cape upon the Iland Teſſell, and the Weſten, (that is the ſteeple of Weſteynder Church, which men doe alſo name the Wambus) one in the other, then they ſhall ſtand a little more northerly then eaſtnortheaſt from you, ſaile in ſo right with them, and you ſhall runne in ſight of the outermoſt buye, which lyeth from the Kyckdowne weſtnorthweſt, and weſt from the Helder. If you come from the Northwards or the weſtwards, and will go in at the Slenck. then bring the Kyckdowne eaſtſoutheaſt from you, or the great Cape upon Huyſdown in a little valley a little to the northwards of the Kyckdowne, to wit, betwixt the Kyckdowne and Cane Neles houſe, ſaile then ſo right in with them, untill that the Cape upon Teſſell and the Weſten are one in the other, then you haue the length of the outermoſt buye, and ſhall not miſſe to meet with it, which lyeth in foure fathom and a halfe at high water, and in a quarter leſſe then foure fathom at a low water. Keepe that Cape and ſteeple one in the other, and ſaile in ſo right with them all alongſt untill paſt the third buye, which lye all, (like as alſo the fourth and fifth) in the middeſt of the fareway, but alongſt to the ſouthwards of them it is deepeſt, the ſouth ſhore is very ſteepe, ſo that having one caſt foure fathome and a halfe, the next caſt you ſhall haue but three fathome, but the weſt ſhore is flat going up; The fourth buye lyeth from the third eaſtnortheaſt, or ſomewhat more eaſterly: the fourth and fifth eaſt and by north. The fifth and ſixth eaſt and by north, and eaſt north eaſt. The ſecond buye lyeth at low water in twenty or one and twenty foot, upon the ſhouldeſt of the Slenck: the other buyes lye in foure fathom at low water, but the ſixth, or innermoſt, in three fathom upon the point of the taile, which you may not ſaile about to the northwards of it, but muſt leaue it on the Larboord ſide, in ſailing in. But you muſt reckon your tydes wel. The fore-flood falleth northnortheaſt, thwart over this channell, and the ſouth grounds, untill halfe flood, and to the contrary the fore-ebbe ſouthſoutheaſt until halfe ebbe. Within the ſixth buye it is broad and wide, and men ſaile in from thence right to the Helder eaſtſoutheaſt.

The Land-deepe. For to ſaile out at the Land-diepe, then run alongſt within a bow ſhot of the foot ſtrand of Huyſdown, and about by the heads, and you ſhal not miſſe the innermoſt buye, which lyeth upon the ſhouldeſt, neereſt the weſt ſhore in ſeventeen foot at high water, and thirteen foot at low water, that ſhouldeſt place is not aboue two ſhippes lengths broad, over it, and alſo within it, it is deepe enough. Thwart of that buye, ſhooteth off a little taile from the ſhore towards the buye, therefore runne cloſe alongſt by the buye, and leaue it on the ſtarboord ſide of you in ſailing out. Beſides that buye, there lye 3 other buyes in the Land-deepe, which you muſt leaue all lying to ſeawards of you, and run through betwixt them and the ſhore, when you are come

paſt

paſt the fourth buye, you ſhall be paſt all the ſhoulds, and you may ſet your courſe that way that you deſire to be.

For to find the Land-deep comming out of the ſea from the ſouthwards, you muſt take the ſounding of the ſhore in foure fathom and a halfe, and runne ſo alongſt by the ſhore, and you ſhall ſaile right with the outermoſt buye; and doing ſo, come no nearer the ſhore, or els you ſhould ſaile vvithin the taile of Arrian Bergers Creek, which ſhooteth off to ſeawards from the ſhore, to the ſouthwards of the ſouth ſand-hill. Or els if you come out of the ſea vvith an open winde then ſet and keep the great Cape upon Huyſdowne, over Dirckooms ſand-hill, (that is, a round ſand-hill a little to the ſouthwards of the Kyckdowne, but not ſo high) and ſaile ſo in right vvith it, you ſhall not miſſe to meet vvith the outermoſt buye, vvhich lyeth at low vvater in foure fathom and a halfe neareſt to the vveſter grounds, or to the ſouther hakes, leaue it on the larboord ſide, and runne in alongſt to the eaſtwards of it, through betwixt it and the ſhore, it lyeth moſt northeaſt, and northeaſt and by north in, you cannot lightly take hurt on neither of both ſides, if you doe but take heed to keep you from the ſhore. Thwart of the Kyckdowne, or comming to the ſouthvvards of it, you muſt edge a little off from the ſhore, for to avoyd a ſhould vvhich lieth therabouts, ſomewhat off from the ſhore. When you come to the ſecond buye, then commeth the mill to the Northwards of the Kyckdown, and at the third, the mill and Cane Neles houſe come one in the other; which 2 buyes lye both in fiue fathom at low vvater. From the third to the innermoſt buye, it is northeaſt and by eaſt, runne cloſe alongſt to the Eaſtwards of it, for to avoyd the foreſayd little tayle of ſand, vvhich (thwart of it) lyeth off from the ſhore, and then forth vvithin a bow ſhot about by the heads, and ſo alongſt by the ſtrand of the Helder: for to ſaile up from the Helder towards the Wieringhen flat, you muſt goe northeaſt, or ſomewhat more eaſterly, according as the wind and tide ſhall be; or elſe in eight or nine fathom alongſt by the Teſſell, untill that the Hoorn come to the Northvvards of Zuydhaffel, but take heed of the Wieringhen ſide, vvhich is ſo ſteepe there, that you may haue twelue or thirteene fathom at one caſt, and ſhould be a ground before you ſhould be able to heaue the lead againe.

Arrian Bergers Creek.

When that the Hoorne commeth then to northwards of Zuydhaffell, then keep them ſo ſtanding, and ſaile up ſo to the Vogelſand, when that the Eyerland commeth even without the eaſt poynt of Teſſell, then you haue the length of the buye upon Burgſand, which lieth on the ſouth ſhore, upon a taile of ſand, vvhich men may ſaile within at 5 or 6 fathom. From that buye upon Burgſand, it is e.l.e. to the Beacon upon Vogelſand, but ſaile upon the foreſaid markes of the Hoorn and Zuydhaffell, ſo long untill that you haue the Cape upon Teſſell, and the mill of Ooſterend one in the other; then keepe them one in the other, leaving the firſt markes, and ſaile up ſo unto the buye or beacon upon the Neſſe, and ſo you ſhall runne amidſt the chanell in the fareway, vvhich is ten, eleven, and twelue fathom deepe. If you bring the mill a little to the vveſtwards of the Cape, then you ſhall be cloſe by the ſouth ſhore, vvhich is ſo ſteepe, that you may not come nearer it, in turning to vvindwards, then in eight or nine fathom. Being come about the Neſſe, then goe on ſouth, and ſouth and by weſt, towards the buye upon the flat.

Burgſand.

The Neſſe.

Of the tydes, and courſe of the ſtreames about theſe foreſayd places.

VPon the Wieringer flat maketh full ſea a ſoutheaſt or northweſt Moone.

Before Teſſell, in Coopvaerders road, an eaſtſoutheaſt, and weſtnorthweſt Moone.

Without the grounds or ſhoulds of the Teſſell, an eaſt and weſt Moone maketh the higheſt water, and in the entring of the Teſſell, an eaſt and by ſouth, and weſt and by north Moone: but the flood goeth a good while longer in. And likewiſe runneth the ebbe alſo longer out, then the loweſt water. When the Moon is ſouth, or ſomewhat more weſterly, it beginneth apparantly to flow without on the ſtrand, and likewiſe upon the ſhoulds.

The fore-flood, and the after-ebbe out of the Teſſel, fall both one with the other northnortheaſt thwart over the grounds and channels, and right out at the Spaniards channell, untill halfe flood: and to the contrary, the fore-ebbe, vvith the after-flood fall right in at the Spaniards channell ſouthſoutheaſt over the ſouth grounds, and thwart over the Slenk and the other channels, untill halfe ebbe. A little while before halfe flood, the flood beginneth to runne right in at the channell, and againe a little before halfe ebbe, the ebbe beginneth to ſet right out at the channell. Therefore he that will ſaile into theſe channels, muſt reckon his tydes very well, wherein conſiſteth very much. Without before the channell in the ſea, the tyde turneth about with the Sunne, ſo that when a ſhippe doth

lye at an anckor without the channels, and hath neither good nor hurt of the waues of the ſea, it ſhould haue but a little ſtill water.

Courſes and Diſtances.

FRom Teſſel to the Maes, ſouthſouthweſt — — 24 leagues.
From Teſſell to the Heads, or the Strait betweene Callis & Dover, ſouthweſt ſomewhat ſoutherly 53 leagues.
From Teſſell or Marſdiep to Callis cliffe ſouthweſt and by ſouth 53 leagues.
From Teſſell to the North Foreland ſouthweſt — — 48 leagues.
From Teſſell to Orfordneſſe weſtſouthweſt — — 37 leagues.
From Teſſell to Yarmouth vveſt, and vveſt and by ſouth 33 leagues.
From Teſſell to the Shield, or Crommer vveſt — — 40 leagues.
From Teſſell or Marſdiep to Flambrough head vveſtnorthweſt 60 leagues.
From the Marſdiep to Lieth in Scotland northweſt and by weſt ſomewhat northerly. — — 100 leagues.
From the Marſdiepe to Newcaſtle vveſtn. w. ſomewhat northerly 83 leagues.
From Teſſell to Boeckneſſe northweſt, and Northweſt & by north 117 leagues.
From the Marſdiep to Aberdine northweſt ſomewhat Northerly 113 leagues.
From the Marſdiep to the Liet of Berghen in Norway north 117 leagues.
From the Marſdiep to the north end of Hitland n. n.w. 160 leagues. and then you ſhall fall about fiue leagues to the eaſtwards of the land.
From the Marſdiep to the Naze north and by eaſt — — 93 leagues.

Heights.

THE Marſdiepe lieth in three and fiftie degrees, ſaile out of the North ſea, (being in that height) eaſt on, and you ſhall fall right with it.

Hovv theſe Lands doe ſhevv themſelues at ſea.

Thus appeareth the Iland Teſſell when it lieth eaſt and by north from you.

Huyſdowne ſheweth it ſelfe thus, when it is eaſtſouth eaſt from you.

CHAP. II.

Of the coaſt of Holland betvvixt Teſſell and the Maes.

TESSELL is a long plaine Iland, vvhereupon ſtand foure Churches, the weſtermoſt hath a high ſharpe ſteeple, and is called Weſteyndt, or S. Iohns, but by the Pilots it is called the Weſten, or the Wambus. To the ſouthwards of that ſtands an other ſharp ſteeple called the Hoorn. The third is called the Burgh, which ſtandeth ſomewhat more to the northwards then the other two beforeſayd. The fourth is called the Oogh, or the Koogh, which is the northermoſt of them all, without ſteeple, and is covered vvith blew ſlates.

The Eyerland lyeth cloſe to the eaſtwards, or to the northwards of the Teſſell, and faſt to it, when it floweth ſomewhat high, it is divided off from the Teſſel by the ſea, and made to an Iland: it ſheweth it ſelfe off at ſea like a low plaine little Iland vvith little hommocks, there ſtandeth upon it no more then two little houſes. Eyerland.

Huyſdown is a ſhort poynt of land with ſome vvhite ſand-hils, vvhereof the greateſt and higheſt is called the Kyckdowne, or Kyckers-downe, the next to the ſouthvvards of it, is called Dirckooms-ſandhill, further to the ſouthwards they run flat off by little and little, and at length to nothing Huyſdown

in

in a flat plaine ſtrand. Vpon the caſt end, called the Helder, lye alſo ſome ſandy hils, betwixt the Helder and the Kyckdowne it is moſt flat ſtrand, with ſome ſandy hils like a dyke, upon which (about halfe way betwixt both) ſtandeth the little or the outermoſt cape, the great cape ſtandeth ſomewhat within the land, about eaſt from the Kyckdowne.

Huyſdowne, or the Marſdeepe and the Maes lye ſouthſouthweſt ſomewhat ſoutherly, and northnortheaſt ſomewhat northerly about foure and twenty leagues aſunder.

Petten. From Huyſdowne to Petten the coaſt lyeth ſouth and by weſt foure leagues. Petten hath a little Church with a little ſteeple, and thereabouts you ſhall ſee two other little ſharpe ſteeples in the Northland. A little to the ſouthwards of Petten lyeth the Hondboſch, a league to the ſouthwards of Petten lyeth Camperdowne, the beſt land to be knowne thereabouts, the north end is a high ſteepe white ſand-hill, which goeth ſloping down: the ſouthermoſt part is gray and rough, being grown over with heath, or ſpyrie graſſe, to the ſouthwards of it lye many rough hommockes or ſand-hilles, where ſometimes you ſhall ſee amongſt them a white ſpot, ſo that it is very

Egmondt upon the Sea. good to be known. From Petten to Egmondt upon the ſea, it is three leagues. Egmondt upon the ſea is alſo very good to be knowne, for it hath a thick flat ſteeple, which ſtandeth like a ſaile in the ſand-hill, and a little to the ſouthwards of it you may ſee Egmont-vvithin, which hath two high ſteeples upon the Abbey cloſe one to the other, vvhereof the one is ſharpe, and the other (to wit, the northermoſt) is flat, becauſe the ſpyre is lately fallen down. A litle to the northwards of the Abbey ſtandeth another ſteeple of the church upon the old walles, but it is not ſo high as that upon the Abbey: ſo that upon all the coaſt of Holland, there is no place ſo good to

Wyck upon the ſea. be knowne as this. From Egmont upon the ſea to Wyck upon the ſea, are three leagues, that is alſo a flat ſteeple: when you are thwart of Wyck upon the ſea, you may ſee Beverwyck a little to the northwards of it, which is a high thick, and ſharpe ſteeple; Beſides that, you may ſee alſo betwixt Egmont and Wyck upon the ſea Caſtricom, and more other ſharp ſteeples. From Wyck upon the ſea to Sant-

Santfoort. fort, it is three leagues. Santford hath a ſharp ſteeple, vvith a high fire-beacon, a little to the ſouthwards of it, in the black ſand-hill which ſheweth it ſelfe alſo like a ſteeple. To the northwards of Santfort lyeth a high vvhite ſand-hill, alongſt over vvhich you may ſee Harlem, a high ſquare croſſe Church, vvhich hath a high ſharp ſteeple upon the midſt of the church, and alſo to the northwards of it, a high ſmall ſteeple, called Baeckneſſer ſteeple; thwart of it hath the coaſt of Holland a great baye. From Santford to Nortwyck upon the Nortwyck ſea, are three leagues, that is a flat ſteeple, vvherby ſtandeth a fire-beacon. To the northvvards of Nortwyck upon the ſea, you may ſee Nortwyck vvithin, a flat ſteeple vvhereupon ſtandeth a little cap not very high, and upon the middeſt of the church ſtandeth a little ſmall tower. From Nortwyck to Catwyck Catwyck. upon the ſea, it is a great league, being alſo a flat ſteeple, vvhich in times paſt hath had a ſpyre: to the ſouthwards of it ſtandeth a high fire-beacon, to ſee to like a ſteeple: you may alſo ſee thereabouts vvithin the land (vvhen you are not very farre from the ſhore) Catvvyck upon the Rhyne, and Rynſburgh, and Valckenburgh, all ſharpe ſteeples. From Catwyck to Schevelinghen are three leagues, the Scheveling Quire of Schevelingh church is ſomewhat higher then the church it ſelfe, in manner as the Haeghs church: a little to the ſouthwards of that church ſtandeth alſo a fire-beacon. About halfe a league vvithin the land, you may ſee the Church of the Haghe, vvhich is very The Haghe good to be knowne, the Quire is higher then the body of the Church. The Haghes ſteeple you may ſee farre aboue any other part of the land. From Schevelingh to the Heyde it is The Heyde two leagues, and from thence forth to Grauefand, or to the North ſide of the Maes, one league. The Heyde is a village vvithout a ſteeple, but a little within the ſand-hill, ſtandeth a flat ſteeple called Monſter. Grauefand is a Monſter. high ſharp ſteeple, very good to be knowne, Grauefand vvhich ſtandeth on the north ſide of the Maes. The Brill is a great flat ſteeple on the ſouth The Brill. ſide of the Maes. All this coaſt of Holland, from Huyſdowne to the Maes, is altogether a clean ſtrand, vvhich men may come ſo neare to as they vvill, into foure and fiue fathom.

The courſe of the ſtreames.

IN the North ſea the tyde falleth round, more then halfe tyde, upon the Broad fourteens, it turneth about vvith the Sunne or the Moone, and falleth but a quarter tyde right alongſt the ſea. Neare the coaſts of Holland & Zealand, the tyde falleth (vvhether it be flood or ebbe) ſomewhat ſloping towards the land, but in the midſt of the tyde, it falleth right alongſt the ſea, and in the laſt of the tyde, it ſetteth to ſeawards, towards the vveſtwards or the northwards.

Betwixt the Marſdeepe and the Maes in the fareway, the fore-flood commeth out of the north ſea, and turneth about vvith the Moone,

Moone, falling towards the land northeaſt, and northeaſt and by north.

The fiſhermen of the Maes ſay, that when they are out of ſight of the land, they can perceiue in calme weather by the turning about of the tyde, vvhether they be to the northwards or to the ſouthwards of the Maes. Somwhat to the ſouthwards of the Maes, the after-flood turneth about againſt the Sunne, but to the northwards of the Maes, it turneth about vvith the Sunne, untill the laſt quarter, and then it ſetteth towards the ſhore, or the coaſt next unto it. They ſay alſo, that alongſt the coaſt of Holland, men haue no helpe of the ebbe in turning to windwards towards the Maes, except they be vvithout ſight of the land, becauſe there goe no ebbes by the land, vvhen the wind is to the ſouthwards of the vveſt.

Of the depths and grounds about theſe places.

Broade Fourteens.

Flue or ſixe leagues without the Teſſell, lyeth the Broad fourteens, lying from thence northeaſt with a ſmall taile, vvhich lyeth about north from the Teſſell, and northweſt from the Flye, to the ſouthwards it runneth with the eaſt ſide againſt Catwyck or Scheueling, but the weſt ſide lyeth off at leaſt eleven or twelue leagues thwart off to ſeawards from Nortwyck and Catwyck, it is a bank moſt of fourteen fathom deep, in ſome places ſomewhat more or leſſe. Betwixt it and the land it is againe eighteen and nineteen, and to the northwards twenty fathom deep. When you come over it about the Teſſel or the Flye, and come againe in 16 or 17 fathom towards the land, then you ſhall begin to ſee the land.

Small-eight.

There runneth off to the ſouthwards into the ſea from the coaſt of Holland three ſmall bankes or ribbes, vvhich are ſomewhat broad and ſhowld by the land, and run off ſharp and deepe to the end, the firſt the Fiſhermen call the Small-eight, and beginneth a little to the ſouthwards of Egmondt upon the ſea: the ſecond the Wterrib thwart of Wyck upon the ſea: the third and ſouthermoſt the Hard, a little to the northwards of Santfoort.

The high ſteeples of Holland & Weſtfrieſland, as Egmont-within, Wyck upon the ſea, Santfoort & other more, men may ſee before they can ſee the ſand-hills fiue leagues without the land, in 14 or 15 fathom, that is, upon the ſouth end of the Broad-fourteenes, but Camperdownes, and the ſand-hills thwart of Harlem, they may ſee before they can ſee ſome of the ſteeples. The ſteeples alongſt the coaſt are moſt of them flat, except the Beverwyck, Schevelinghen and Santfoort.

Before the Maes and Goeree men may ſee the land in fourteen and fifteen fathom.

Courſes and Diſtances.

From the Maes or Goeree to Dover, ſouthweſt and by weſt ſomewhat vveſterly 35 leagues.

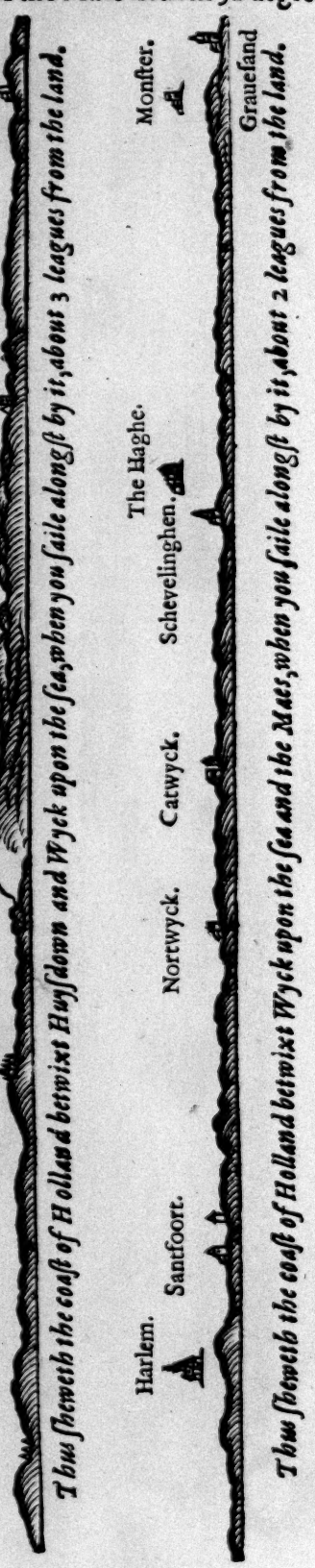
From the Maes to the north Foreland, vveſt ſouthweſt weſterly 32 leagues.

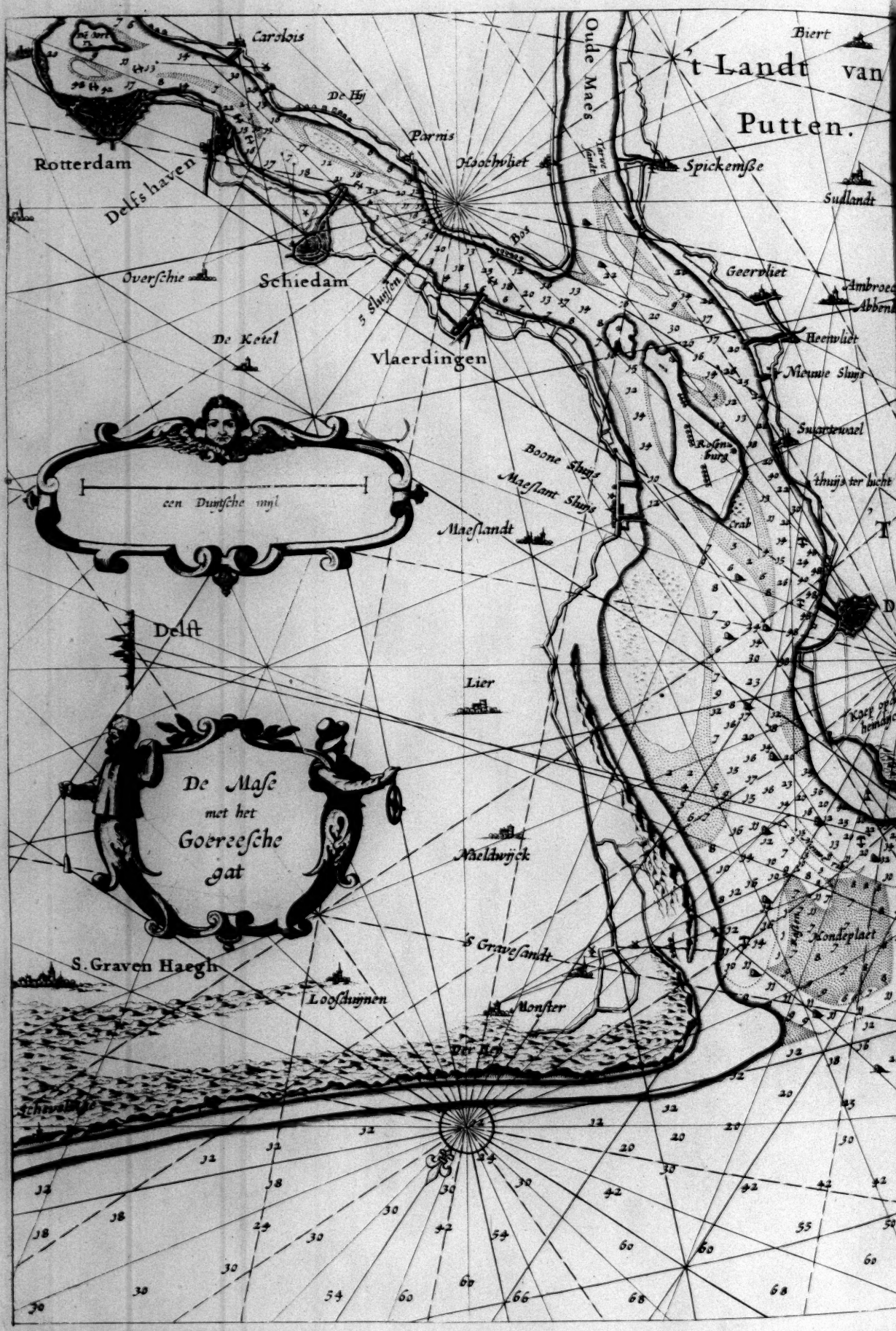
From the Maes to the Naze, weſt 29 leagues.

From the Maes to Hitland n.n.w. 180 leagues

Heights.

The north ſide of the Maes lieth in 52 degrees.




Carolois
De Hij
Parmis
Hoochvliet
Oude Maes
Biert
't Landt van
Putten.
Spickemße
Sudlandt
Rotterdam
Delfs haven
Overschie
Schiedam
5 Sluysen
Geervliet
Ambroes
Abbenis
De Ketel
Vlaerdingen
Heenvliet
Nieuwe Sluys
Swartewael
Boone Sluys
Maesland Sluys
Maeslandt
Crab
't huys ter lucht
een Duytsche mijl
Delft
Lier
De Maese
met het
Goereesche
gat
Meldwijck
's Gravesandt
Kondeplaet
S. Graven Haegh
Loosduynen
Monster
Der Hey

Met Privilegie der Ed. H. M
Heeren Staten generael
voor thien jaren

Middelharnis

Sommerdyck

VLACKEE.

Dirxlandt

Melissant

Bommene

Den Hals

Hellevoet Sluijs

Hellevoet

Quack

Nieuwen hoorn

De Stelle

Goeree

Outdorp

Nolle

West voo ren

oste 't Landt van

Goeree.

Rocange

Wit gloy

Den Hinder

Westplaet

CHAP. III.

Of the Maes, and Goerees gat or channell.

THE Maes hath two channels, or deeps, the norther channell goeth in by the north ſhore, and the ſouther by the ſouth ſhore, or by the land of the Brill. Betwixt theſe two deeps lieth a great plate of ſand, called the Honde-plate, there remaineth at low vvater upon it ſixe and ſeven foot, and at ſome places eight foot vvater.

For to ſaile in at the norther channell.

Vpon the north ſhore of the Maes about ſouthweſt from Graueſand, ſtand two capes. For to ſaile in at the norther chanell, bring the innermoſt of the two, that is, the greateſt cape, a halfe handſpikes length to the ſouthwards of the outermoſt, and then they ſhall ſtand a little more ſoutherly then eaſt from you; keepe them ſo ſtanding, and ſaile ſo right in, and you ſhall not miſſe to fall right vvith the outermoſt buye, vvhich lyeth at low vvater in twenty foote. Or elſe if you come from the northwards alongſt by the ſtrand, and keepe the ſounding of the ſhore in twenty foot at low vvater, or ſomewhat more, according as it ſhall haue flowed, you ſhall fall right vvith the outermoſt buye: or if you keepe neerer to the ſhore in eleven or twelue foote, then you ſhall fall vvith the ſecond buye. From the outermoſt buye to the ſecond, ſaile yet right in vvith the capes, vvhich lieth in ten or eleven foote upon the ſhowldeſt of the channell, right thwart of the outermoſt poynt of the land on the north ſide, but nearer the Honde-plate then the poynt vvhich lieth off from the north poynt, ſo that you muſt goe about to the northwards of it in ſayling in, you may alſo for need goe to the ſouthwards of it, but alongſt to the northwards it is broadeſt, but in all it is not wide. From the north poynt runneth off a litle taile, whereof you muſt take very good heed, it is very ſteepe, upon it the ſea breaketh and rippleth very much: vvith vveſterly windes the ſea is all in a breach all over that northerne channell, thwart of this foreſaid ſecond buye, ſo that to ſee to, it ſheweth it ſelfe as if it were not a channell; but feare not to runne cloſe alongſt to the northwards of the foreſaid ſecond buye, thwart of it you ſhall not haue leſſe at halfe flood then thirteen foot water, or thereabouts. From the ſecond buye to the third, the courſe is a little more northerly: you may ſee perfectly inough from the one to the other. When you come to the third buye, the innermoſt cape ſtandeth a litle to the northwards of the outermoſt. This third buye lieth at the north end of the Raſſes alſo in eleven foote as the ſecond, which you muſt alſo goe about to the northwards of. Betwixt the ſecond and the third in the fareway it is alſo all one depth. The north ſhore is ſteepe about the ſecond buye, but towards the third buye it is ſomewhat flatter.

The fourth buye lyeth from the third ſouth-ſoutheaſt upon the ſouth end of the Raſſes. The Raſſes The Raſſes is a great ſand-rib on the eaſt ſide of the Honde-plate, which is very ſteepe, and with low ebbes commeth aboue water at ſome places.

Betwixt the third and fourth buye it is deep in the right fareway fourteen, fifteen, and ſixteen foot, that the Fiſhermen call the Panne, The Panne on the northeaſt ſide it is there riſing ground, which in turning to windward you may borrow of it by your lead ſo ſhowld as you will. When the ſteeples of Monſter and Graueſand come one in the other, then you are paſt the the Raſſes. The fifth buye lyeth in eleven or twelue foot water upon the eaſt poynt of the new ribbe, and lyeth from the fourth buye ſoutheaſt and by ſouth: all which buyes you muſt leaue on the ſtarbord ſide in ſailing in. To the eaſtwards of it, the ſouther & norther channels come together in one. From the fifth buye to the ſixth, which is the buye againſt the Polder, it is moſt one courſe as before, but you may eaſily ſee from one to the other, that you muſt leaue alſo on the ſtarbord ſide; thwart of it in the fareway, it is ſixteene and ſeventeene foot deepe. Comming to the eaſtwards of that buye againſt the Polder, you ſhall ſee a houſe upon the dyke betwixt Swartewall and the head of the Brill, called the houſe of Lucht, bring that over Ambroeck, which is ſomewhat a flat ſteeple, a litle to the ſouthwards of Swartwall, and ſaile ſo right in with them, untill you come before the Brill, if you deſire to anckor there, and you ſhall ſo leaue two buyes more on the larboord ſide. The firſt is the eaſtermoſt buy againſt the Polder: the ſecond, the buye upon the Crab, which is a great broad tayle which lieth off from the Iland Roſenburgh untill paſt the Brill. But if you will not anckor before the Brill, but will ſaile further up, then run up right with the foreſayd markes of Ambroeck, and the houſe of Lucht, untill you come neare the ſhore, and then alongſt by it, untill you come to Heenvliet. From the eaſt end of Rooſenburgh runneth off a taile, which you might ſail within when you ſail upwards. If you bring not the Tower of the Brill, (when you are paſt the heads of Swartewall) without or to the northwards of theſe heads, but keepe it to the ſouthwards of them, then you cannot ſaile within it, but ſhall ſaile farre enough alongſt to the ſouthwards of it. A little to the eaſtwards of Heenvliet goeth in the old Maes, The old Maes. the flood falleth in there very ſtrong, whereof you muſt be carefull, that you be not carried

The Polder. Crabbe.

upon the Wheate ſand, that is a great plate of ſand lying in the middeſt of the mouth of the old Maes, vvhich falleth a great wayes drye at low vvater, and lyeth out with a long ſmall poynt to the weſtwards into the Maes. For to avoyd it, you muſt look out for a wood of trees ſtanding on the ſouth ſhore, a little to the eaſtwards of the old Maes, keep the ſteeple of Roterdam to the northwards of that wood, and then you ſhall goe cleare of that Wheat ſand, but if you let that ſteeple come to the ſouthwards of that foreſayd wood, you ſhall certainly come to touch upon that foreſayd tayle. To the northwards of the Wheate ſand goeth in a deepe, which men may ſaile up in the old Maes to Dordrecht; in it lye alſo two buyes, he that will runne in there, let him run in by the foreſayd marks of the ſteeple of Roterdam, and the wood of trees, ſo long untill that the ſteeple of the Brill come to a tyled houſe which ſtandeth upon the ſouth ſide of the eaſt end of Roſenburch, and keepe them ſo ſtanding, and then he ſhall not miſſe the buye. Being paſt the old Maes, you muſt ſaile up, keeping the middle of the channell paſt Vlaerdinghen unto fiue Sluces; from thence you muſt chuſe the ſouth ſhore, and run cloſe alongſt by it, untill you be over a little ſhowld or banke, whereupon is at low water eleven or twelue foote water, the neerer the ſouth ſhore the deeper, lying thwart over the Maes, as ſoon as you ſhall be paſt that, then goe right towards the head of Schiedam, there you ſhall haue the deepeſt water.

Wheate ſand.

If you will goe to Delfs-haven, then (being paſt Schiedam) keep the ſounding of the north ſhore, and run alongſt by it untill you come before the haven, and anckor there. But if you will ſaile to Roterdam, then runne alongſt by the north ſhore, ſo long untill that Overſchie and the houſe of Spain come one in the other, then edge over, or a little ſooner unto the ſouth-ſhore, and run alongſt by it, or bring the ſteeple of Vlaerdinghen (when you are paſt the head of Schiedam) over the third houſe upon the Schiedams head, and keep that ſo ſtanding ſo long untill that the mill, and the head Charlois (whereupon ſtandeth a little wood of trees) come one in the other, & ſo you ſhall leaue on the larbord ſide, a litle ſhowld plate, that lieth about halfe wayes betwixt Schiedam and Delfs-haven, & run alongſt to the ſouthwards of the ſhowld that lyeth before the haven. Vpon that foreſayd plate remaineth no more then 7 foot water, and upon the ſhowld before the haven, but 2 or 3 foot water, and are both very ſteep. When the foreſayd mill, and the head of Charlois come one in the other, then keepe them ſo ſtanding untill that you come thwart of the new head of Roterdam, ſaile then towards the towne, and cloſe alongſt by it, in betwixt the towne and the plate, there you may anckor.

Delfs haven.

For to find the ſouther channell (coming in out of the ſea) before you can ſee the capes, you muſt bring the ſteeple of the Brill (which is a thick flat ſteeple without any ſpire or ſharp top upon it) eaſtſoutheaſt from you, or ſomewhat more eaſterly or ſoutherly, according as you get ſight of the capes; then bring them one in the other, & run ſo right in with them, or els if you bring the ſteeple of the Brill a handſpikes length to the northwards of Ooſtvoorn, & run ſo right in, you ſhall without faile run in ſight of the outermoſt buye, which lyeth at low water in three fathom.

For to ſaile into the ſouther chanell of the Maes.

From the outermoſt buye to the ſecond and third buye, you muſt ſaile yet right in with the capes; the ſecond buye lyeth in thirteen, & the third in eleven foot; being thwart of it, the ſteeple of Goeree commeth a litle upon the foot-ſtrand of the land of the Brill. The fourth buye lyeth from the third, yet neere upon the ſame courſe right in with the capes, but a litle more ſoutherly. Betwixt theſe buyes is the ſhowldeſt of the Maes ten foot, by the fourth buye it beginneth again to be deeper, that lieth in 11 foot. From without unto the fourth buye, the channell is of a good bredth, ſo that you may turne in to windwards a good wayes on both ſides of the buyes, and borrow of the ſhores on both ſides by your lead, but right alongſt a litle to the ſouthwards of the buyes, is the perfect deepeſt water. The fift buye lyeth from the fourth eaſtnortheaſt, and northeaſt and by eaſt, on the north ſide of the deepe on the Honde-plate in eleven foote, which you muſt leaue on the larbord ſide, and run in about to the ſouthwards of it. From the fourth to the fifth buye alongſt to the ſouthwards of the buyes, in the right fare-way, it is deepe, thirteen, fifteen, fixteen, and ſeventeen foot, and by the fifth buye fiue fathom. The ſixth buye lyeth from the fifth eaſt and by north in eleven foot and a halfe, alſo on the north ſhore, or Honde-plate, alongſt to the ſouthwards of it, the channell is at the narroweſt, and fiue and ſixe fathom deepe, the ſouth ſhore is thereabouts very ſteepe, cloſe to it, it is ſixe and ſixe fathom and a halfe deepe. As ſoone as you come paſt the ſixth buye, then commeth Maeſlands-ſluce, and the ſteeple of Vlaerdinghen one in the other; keepe them ſo one in the other, and runne in ſo right with them, ſo long untill that you get the houſe of Lucht over Ambroeck, and then you ſhall run farre enough alongſt to the northwards of the Polder, and by the ſide of the ſeventh buye, alongſt in the right deepe; you ſhall finde in this fareway foure, and foure fathom and a halfe, go then towards the Bril, or upwards along where you deſire to be, as is ſayd here before in the deſcription of the norther channell.

NOTE

NOTE.

All theſe foreſayd depths, and thoſe which follow of the Goerees gat, are ſet here (as alſo in the Carde) according to the loweſt water of a common tyde, and it floweth there ſixe foot up and downe.

The Goerees-gat.

BEtwixt the land of the Brill and Goeree, go in alſo two channels, the northermoſt is called the Quacks-deep, and is not for great ſhips, but onely for ſmackes, and ſmall ſhippes: the other is the Goerees-gat. Betwixt theſe two channels lyeth a great plate called the Hinder, which at low water is not deeper then fiue, ſixe, and ſeven foot. To the northwards of it goeth in the Quacks-deepe, and to the ſouthwards of it the Goerees gat.

Quacks-deep.

For to finde the Quacks deepe comming in out of the weſt, you muſt keepe the ſteeple of the Brill eaſt from you, and run ſo in, until that a great countrey houſe, (which you ſhall ſee ſtand alone a little within the poynt of the Quacke) come to the ſouthermoſt ſand-hills of the land of the Brill, which ſhall then ſtand neare about ſoutheaſt from you, keep that then ſo ſtanding, and runne ſo right in, untill that Ooſtvoorn come to the weſtermoſt or ſouthermoſt ſand-hills, then runne in alongſt by the ſtrand ſomewhat more ſoutherly, untill that Goeree come to the caſtwards, or within the ſand-hills, and then you ſhall bee paſt the eaſt poynt of the Hinder, which the Pilots call the Buyen, runne then towards Goeree, or to the caſtwards, to Hellevoets ſluce, where you deſire to be.

Goerees gat.

For to ſaile in at the Goerees gat, you muſt bring the ſteeple of Goeree, and the cape upon the land of Goeree, one in the other, and then they ſhall ſtand eaſt & by ſouth, and eaſtſouth-eaſt from you: or if you cannot ſee the cape, then bring the ſteeple eaſt and by ſouth, or eaſtſoutheaſt from you, according as you ſhall haue the winde, ſaile in right with it, until you come hard aboord the ſtrand, and within a bowles caſt in alongſt by it, eaſt and by north, and eaſt in, ſo long untill that the land doe fall away more to the ſouthwards: thereabouts runneth off from the ſhore a litle taile, which men might ſaile within, in going out, but not in comming in, there you muſt edge a little further off from the ſhore, being paſt that, luffe up again towards the ſhore, or haven of Goeree, and anckor there before it; or els if you will run up to Hellevoet-ſluce, then bring the mill which ſtandeth to the weſtwards of Goeree, a litle to the northwards of the ſteeple of Goeree, keepe them ſo ſtanding, and ſaile ſo up to Hellevoet ſluce, and you ſhall not come neare the plate which lyeth over againſt or to the ſouthwards of Hellevoet-ſluce.

For to ſaile to Hellevoet ſluce.

When you ſaile in at the Goerees gat with a bare ſoutherly winde, and that you cannot bring the cape and ſteeple one in the other, you may bring the ſteeple well eaſtſoutheaſt, or a great capſtone bars length to the northwards of the cape, and then run over untill you come againſt the ſtrand, and ſo you ſhall runne over the taile of the Hinder in fourteen and fifteen foot at low water, but when the cape and ſteeple are one in the other, you ſhall not haue leſſe then nineteen or twenty foot. Being come over the taile of the Hinder, in the right deepe, it is ſixe, ſeven, and eight fathom deepe, the neerer the ſtrand the deeper water. A little within the cape, or almoſt thwart of it, is the narroweſt of the channell, further in it is wider; on the north ſide towards the Hinder, it is riſing ground, but the ſouth ſhore alongſt by the ſtrand is very ſteepe.

Of the tydes, and courſe of the ſtreames.

BEfore the Maes a ſouthweſt and by weſt, and a northeaſt and by eaſt moone maketh a high water.

Before the Brill a ſouthweſt and ſouthweſt and by ſouth, and northeaſt, and northeaſt and by north moone.

Before the old Maes a ſouthweſt and northeaſt Moone.

Before Roterdam a ſouthweſt and by weſt, and northeaſt and by eaſt Moone.

Before Dordrecht a weſtſouthweſt Moone.

In the Goerees gat, and before Goeree, a ſouthweſt and by ſouth, and ſouthſouthweſt Moone.

Before Hellevoet ſluce a ſouthweſt and by ſouth Moone.

Betwixt the Marſdeep and the Maes in the fareway, the fore-flood commeth out of the north ſea, and turneth about by little and little northeaſt and northeaſt and by north towards the land.

In the ſea thwart of theſe places, (without ſight of land) it is a poynt, or a poynt and a halfe later full ſea, the further from the land the later.

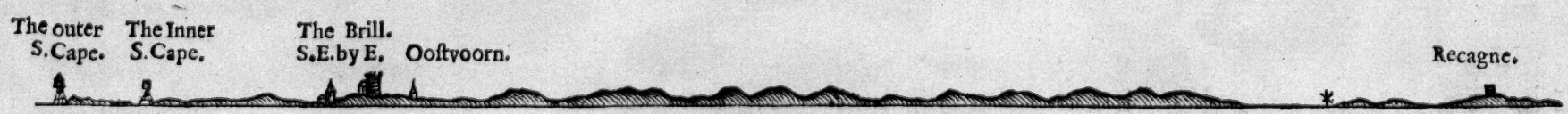
Not very long after that the flood beginneth to goe without the Maes, it doth beginne alſo to go into the Maes, but the after-flood falleth ſtrong in, and ſo likewiſe in the Goerees gat. Cloſe before the channels by the land, the tyde turneth about with the Sunne, ſo that when the after-flood falleth into the channels, it turneth to the ſouthwards, and becommeth again a running ebbe: the after-ebbe falleth againe thwart off to ſeawards out of the channels.

The riſing of the land of the Maes, and Goerees gat.

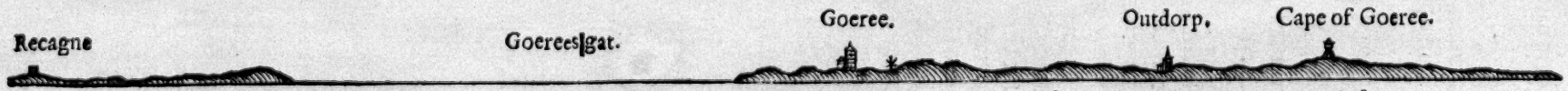
Theſe two figures belong at the A. A. *one to the other.*

When Grauesand is ſoutheaſt and by ſouth from you, being a halfe league without the land, then the coaſt of Holland to the Northwards of the Maes, ſheweth it ſelfe as is portrayed in the two figures here aboue.

When you are open before the Maes, the land to the northwards of it, ſheweth it ſelfe thus.

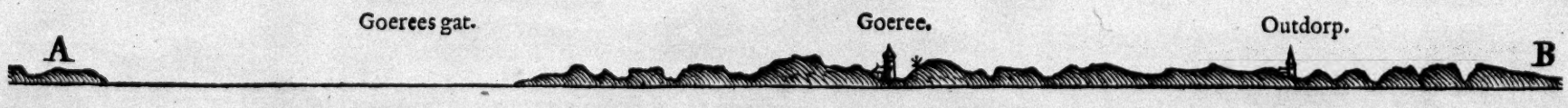


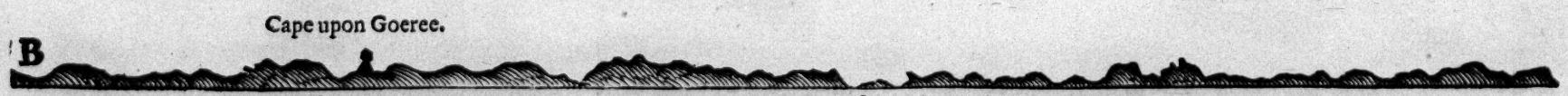
Theſe two figures belong one to the other.



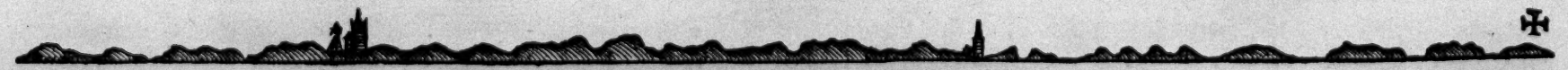
When you are open before the Maes, being northweſt and by weſt from the Brill, then the land to the ſouthwards of the Maes ſheweth it ſelfe as is prefigured in the two figures here aboue.

Theſe two figures following belong unto this at the A A *and* B B *one to the other.*

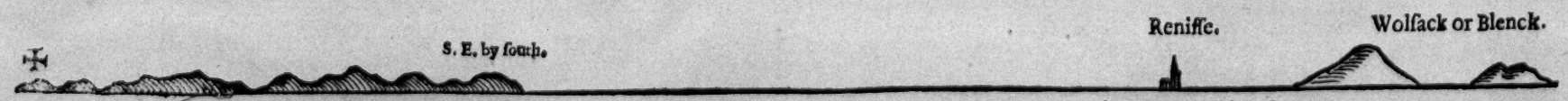




When you are before the Goerees gat, about a league without the land, then the land on both ſides of it, ſheweth as is demonſtrated in the three figures here aboue.



Theſe two figures belong at the croſſes one to the other.



The land of Goeree ſheweth it ſelfe as is portrayed in the two figures here aboue, when the cape and ſteeple come one to the other, and that you are a league and a halfe without the land.

CHAP. IIII.

The channels of Brevvers-haven, Zierickzee, and Ter Veere.

BEtwixt the land of Goeree and Scowen, there goe in alſo two channels, the northermoſt is called the Kevitſen, which is onely for ſmall ſhippes; the ſouthermoſt for great ſhippes is called the Brewers-havens channell. Betwixt them lyeth a grear dry ſand, called the Springer, which floweth not under, but with very high floods.

Kevitſen. For to finde the Kevitſen, you muſt bring the ſteeple of Zierickzee ſoutheaſt & by ſouth, or a little more ſoutherly from you, and then you ſhall eſpye upon the land of Schowen, about the ſteeple of Zierickzee, a wood of trees, bring that and the foreſayd ſteeple of Zierickſee one in the other, and runne ſo right in untill you come againſt the ſand, ſo ſhowld or neare as you can, and then you runne farre enough alongſt to the weſtwards of the weſt head. When you come within the vveſt head, againſt the ſand on the ſouth ſide, then goe in eaſt alongſt by the foreſayd dry ſand the Springer, at the end of the aforeſayd drye ſand ſhooteth off alſo a poynt under vvater, the vvhich you muſt ſound for: being paſt that, runne then directly vvith Brewers-haven, as is ſhewed in the Card. In this channell it is upon the ſhowldeſt ten foot deepe.

The Brevvers-haven.

BEfore the land of Schowen, thwart of the Brewers-havens channell, lye three bankes, the outermoſt, called the Bree-bank, lyeth a kenning without the land, upon which it is ſeven fathom deepe, and again within it, nineteen fathom deep; upon the ſecond nearer the ſhore, it is fiue fathom deepe, and againe vvithin it ſeven fathom deep: the third, called the Ooſter, lyeth cloſe by the land, and runneth in to the eaſtwards, betwixt Schowen and the land of Goeree, upon it is no more then ſixe foot vvater, vvhen you will ſaile into the channell of Brewers-haven, you muſt goe about to the vveſtwards of it.

Reniſſe. Wolfack. Vpon the vveſt end of Schowen ſtand two capes, bring them one in the other, and runne ſo right in vvith them, untill the ſteeple of the Reniſſe (vvhich ſteeple is ſomewhat ſharpe) come to the Blenk or Wolfack, that is, a high vvhite ſand-hill, (vvhich ſheweth it ſelfe out in vvhiteneſſe & height aboue all the other ſand-hills) then leaue the capes, and runne in by the markes of the Blenck and Reniſſe, untill that Outdorp, (a little white ſharpe ſteeple upon the land of Goeree) come to the ſteeple of Goeree, and ſo you ſhall go in betwixt the Ooſter on the larboord ſide, and the Hill on the ſtarboord ſide, and alongſt a little to the ſouthwards of the outermoſt buye, untill you come within the Ooſter. When that Outdorpe and Goeree are one in the other, then leaue alſo the foreſaid markes of Reniſſe, and runne in right with Coeree, untill that you come by the ſecond buye; or (if there lye no buyes) untill that Bommenee come a litle vvithout the Oxetaile, that is, a poynt of Schowen lying out a litle to the vveſtwards of Brewers-haven, ſail ſo right in untill you be paſt the Brewers-haven. This channell of Brewers-haven, is a broad and deep channell, very convenient for great ſhips, he that muſt turn in or out to windwards, may runne alongſt a good wayes on both ſides, as well of the outermoſt as the ſecond buye, but to the ſouthwards of them it is deepeſt, and the common fare-way. The third buye is a buye vvith a taile, and lyeth upon a poynt of a taile which runneth off from the Ooſter, which you may not goe to the northwards of, unleſſe it were very cloſe alongſt by it: all alongſt by the ſtrand of Schowen it is deepe and ſteepe, you may runne cloſe alongſt by it from the outermoſt buye unto Brewers-haven, there is nothing that can hurt you; the ſhowldeſt of this channell is eighteen or ninteen foot, at leaſt a league without the land in the coming in betwixt the Ooſter and the Hill: further inwards it is foure, fiue, ſixe, & ſeven, and at ſome places ten and eleven fathom, as it is ſhewed in the Carde by numbers of feete, and all at lowe water.

The Keel, the New-deep, the Velt, and the Roompot.

MEN may runne into Zierickzee through divers channels, through the Keele, the New-deepe, the Velt, and the Roompot. For to ſaile through the Keel, then runne in as is before ſayd of the channell of Brewers haven, firſt in by the markes of the Blenck and Reniſſe, ſo long untill that Ter Veer come to the weſtermoſt poynt of Schowen, called the Hoot, keepe them one in the other, or one to the other, and runne ſo in untill you come by the ſtrand, and then forth alongſt by it, and you ſhall find ſo in the Keel at the ſhowldeſt, eighteen and nineteen foot, and comming againſt the poynt of the Hoot, foure and fiue fathom. Betwixt the Hoot and the New ſand, (which falleth at the eaſt end at ſome places dry) runne all allongſt by the land of Schowen, untill you come thwart of the ſouthermoſt cape of Scowen, edge then ſomewhat off from the ſhore towards the Baniaert, for to avoyd a

ſhare

Duvelandt.

't Landt van Cat

Colins plaet

Oriſand

Draiſcher

Ziericzee

'T LANDT

Kerckwerve

Sonnemare

Nieuwerkerck

Bommenee

Brouwerſhaven

Pachvoet

Den Hals

De Stelle

Oſſe ſteert

VAN

Straaſkerke

Koukerck

Harmſte

Nortwelle

Bos boomen

SCHOVWEN.

De Val

Remſte

Stembrick

Goeree

Outdorp

Nolle

'T LANDT VAN GOEREE

Springer meeſt altijt droogh

De Ingheert

Keetwerf

Den Hinder

Oſſe

Den Ooſter.

Een Duytſche mijl.

WALCHEREN.

Middelburg

Cortgeen

Westkercke

Sandick

Der Veere

Der Gapinge

Rooskercke

Polder

Oostcappelen

Dombargh

't Hoot

Schuteman

Onrust

Wolleplaet

Room Pot

Polle

Hoofd plaet

De Banjaert

aen alle canten steil

't Nieuwe diep

't Veer gat.

De Gaten
Van
Brouwershaven
Ziericzee en
Der Veere

Met Privilegie der Ed. H. M.
Heeren Staten generael
voor thien jaren.

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ſhare vvhich lyeth off from Schowen, which you might ſaile vvithin vvhen you come in out of the ſea. There lyeth a buye upon the poynt, vvhereby it is good to be knowne: being paſt that, run all alongſt by the ſhore, untill you come to Zierickzee: ſomewhat vvithin the buye, upon the poynt of the ſhare, there is lately layd an other little buye for thoſe that vvill ſaile that vvayes out, for that they may not ſaile upon the eaſt ſide of the foreſayd ſhare.

The New deepe. For to ſaile in at the New deepe, you muſt looke out for two ſtone fire-beacons, ſtanding a little to the ſouthwrrds of the foreſayd capes of the channell of Brewers-haven, bring the innermoſt a handſpikes length to the ſouthwards of the outermoſt, and runne then right in vvith them, and then you ſhall runne in betwixt the Hill and the New-ſand in ſixteen, ſeventeene, and eighteene foot, go in alongſt by the foreſayd markes, untill that you come by the ſtrand, and then you come into the Keel. If you bring the fire-beacons one in the other, and ſaile ſo right in, you ſhall then runne over the tayle of the Hill in eleven or twelue foote. The Hill is a ſand ſomewhat flat, vvhich men may come neere to the ſouth ſide by their lead, but the New-ſand is very ſteepe, and the ſea breaketh very much upon it. When as that you come in by the ſtrand into the Keel, then run in alongſt by the ſtrand, as is beforeſayd in the deſcription of the Keel.

Velt.he For to ſaile in at the Velt, you muſt obſerue theſe markes here under deſcribed: almoſt upon the ſouthermoſt end of Schowen ſtandeth a tower alone in the field, vvith a cape upon it, called Weſt-ſchowen, bring that tower a capſtone barres length to the ſouthvvards of the foreſayd ſouthermoſt cape of Weſtſchowen, and runne ſo right in, and then you ſhall runne through betwixt the Nevv-ſand and the Baniard, and ſhall find upon the ſhowldeſt (thvvart of the outermoſt poynt of the Nevv-ſand) tvvelue and fourteene foot; being paſt that, there will be againe fifteen, ſixteen, and eighteen foote, and by the ſtrand twenty foot deepe. When you come in by the ſtrand, runne all alongſt by it untill you come even to Zierickzee, as here before is ſayd of the Keel, and the New-deepe. When you runne in at this channel, you muſt take very good heed of the Baniaert, vvhich is very ſteepe upon the north ſide; cloſe to it, there is three, foure, and fiue fathom, but thwart of the foreſayd ſtrand which lyeth off from Schowen, ſixe and ſeven fathom deep. The New-ſand is indifferent flat on the ſouth ſide, that you may borrow of it by your lead.

The Veer-gat.

Markes of the Baniaert. FOR to ſaile in at the Veergat (coming from the northwards) you muſt keepe Weſtcappell not to the weſtwards of ſouth from you, and then you cannot come too neere the Baniaert: but if you bring Weſtcappell to the vveſtwards of the ſouth from you, you ſhould lightly ſaile upon the Baniaert, runne ſo right with Weſt-cappell, untill that Middlebrough come over Eaſt-chappel, then you are to the end of the Baniaert, ſaile then right with Eaſtcappell and Middelbrough, untill that Cortgeen come through or a great capſtone barres length to the Southwards of Weſtkerck, that are two towers ſtanding in the ſuncken land, and ſhall be then about eaſtſoutheaſt from you, keepe theſe towers ſo ſtanding, and run in ſo right with them, and you ſhall runne in ſight of the firſt buye of the Veergat. In the Veergat lye three buyes with two bottomes, of faſhion like great Hogſheads, vvhich you muſt leaue all on the ſtarbord ſide. Before you come to the firſt buye, you ſhall ſaile by another buye on the larbord ſide, lying upon the poynt of the Polle, which is a poynt of the Baniaert, that is, a Peare-buye, of faſhion like all other ſea-buyes that lye in the Maes or elswhere. The foreſayd firſt buye in the Veergat lyeth in three fathom and a halfe. From the firſt to the ſecond and third buye, the courſe is ſoutheaſt and by eaſt, or ſomewhat more ſoutherly, but you may eaſily ſee from the one to the other. The ſecond and third buyes lye in two fathom, each upon a point of a plate called the Maide. Over againſt the third buye lieth a ſhowld called the Vnreſt, vvhich lyeth vvith a long ſharpe poynt towards the third buye, ſo that it is not there very broad betwixt them, therefore you muſt runne cloſe alongſt to the northwards of the buye: betwixt the buye and the foreſayd point of the Unreſt, it is not deeper then twelue and thirteen foote, but thwart of the firſt and ſecond buye, it is broad and deepe enough. Being paſt the third buye, ſaile then right to Ter-Veer. Over againſt Ter-Veer lieth a plate called the Scotſman, which you haue onely to avoid.

The Polle. Mayd. Vnreſt.

For to ſaile in at the Roompot. If you will goe in at the Roompot to Zierickzee, and that you bee come betwixt the foreſaid Pearebuye upon the point of the Polle, and the firſt or outermoſt buye of the Veergat, then commeth Domburgh to the Hoot,

Hoot, which is a white ſand-hill upon Walcheren, almoſt of faſhion like the Woolſackes upon the land of Schowen: keepe them one in the other, and you ſhall runne alongſt by two buyes more, which ſhall lye on the larbord ſide alongſt by the Polle, and you ſhall ſee one buye with a tayle lying upon the weſt poynt of the Woolplate, over againſt the third buye of the Polle: betwixt theſe two buyes you muſt run through, leaving that with the tayle on the ſtarbord ſide, and runne about by it to the eaſtwards. There lye alſo two buyes with tayles, (beſides the foreſayd) upon the Woolplate, you may eaſily ſee from one to the other, thete you muſt leaue on the ſtarbord ſide, and runne alongſt to the northwards of them, about eaſtſoutheaſt on, ſo long that the ſteeple of Koukercke (upon Schowen) come even without the poynt of Schowen, runne then right with that poynt, and about by it, and then alongſt by the ſhore unto Zierickzee. When that you runne towards the point of Schowen, then you ſaile through betwixt two buyes more, the one lying on the larbord ſide, upon the caſtermoſt point of the Baniaert, or Hoochplate, and the other with a taile on the ſtarbord ſide, upon the point of another plate called Poolvoet, lying betwixt the land of Schowen and Oreſand. All the buyes with tailes men muſt leaue (in ſailing in) on the ſtarbord ſide, and thoſe without tailes on the larbord ſide.

Wol-plate

The Fiſhermen runne (by day) moſt about to the ſouthwards of the Poolvoet plate, and leaue the foreſayd buye with the taile, then on the larbord ſide; that plate is ſomwhat flat, that men may borrow of it by their lead, but they muſt ſound quick: but by night they runne by Schowen cloſe alongſt by the ſhore, which is exceeding ſteepe and needle too.

Of the tydes, and courſe of the ſtreames.

BEfore Brewers-haven a ſouthſouthweſt and northnortheaſt Moon maketh high water.

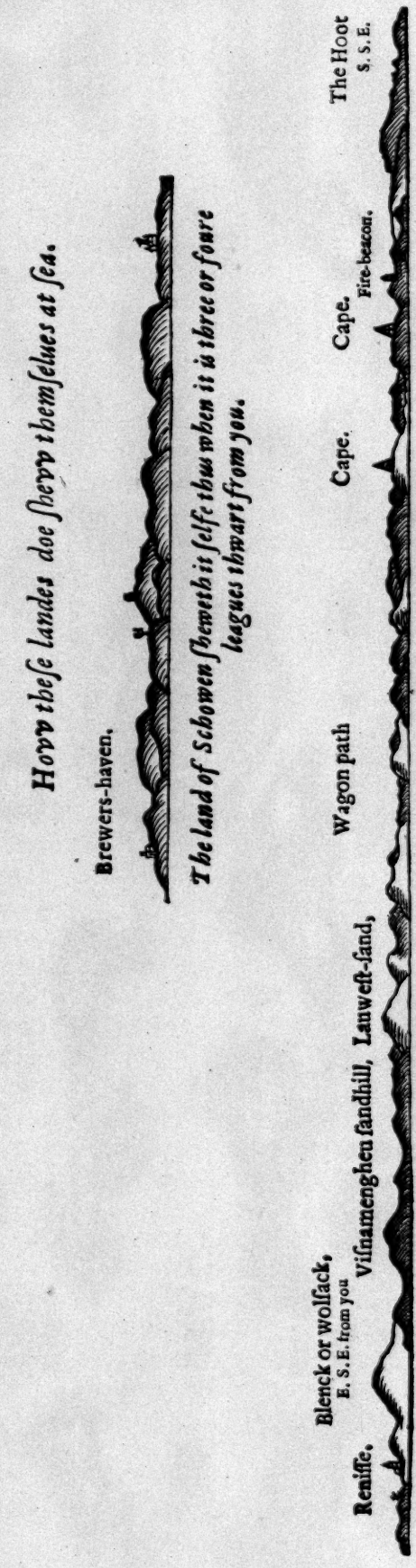
In the channel of Brewers-haven a ſouth and by weſt Moone.

At Ter-Veer a ſouthſoutheweſt and northnortheaſt Moone.

In the Veer-gat a ſouth and north Moone.

It is not good to run in at the Veer-gat, eſpecially with a ſoutherly or ſouthweſt winde, before that the flood be halfe ſpent, for the after-ebbe, and the fore-flood fall thwart over the Baniaert hard in at the Roompot, towards the land of Schowen, but when the flood is halfe ſpent, then it falleth right in at the Veer-gat. When the Moone is ſoutheaſt or northweſt, then the water is there already two third parts flowen.

Like as it is here before ſayd of the Maes and the Goerees gat, ſo alſo here before the chanels of Brewers-haven and Ter-Veer, the flood turneth about with the Sun, ſo that the after-flood falleth in at the channels, and then afterwards turneth about to the ſouthwards, & becometh a running ebbe, but the after-ebbs fall right out at the chanels thwart into the ſea, & then with the fore-flood about again to the northwards.



VLAEN

Casandt.

WALCHE

REN.

Breskens

Rämekens

O. Souborgh

W. Souborgh

Vlißingen

Middelborgh

Der Sluys

't Sluis

S. Anna

S. Lambert

O. Pumn

Cruke sandt

Inner Wielinghe

Der Gapingh

Dishoeck

Cruke kerke

Inner dam.

Darnhille

Soutelande

De Ham

De Wielinge

Bunens kercke

Oosterr

Raßen

Droge Raen

De

Oostkappel

Westkappel

't Hoot

Domborgh

Noorder Raßen

Deurloo

Calket

't Landtje

Duerens

Oostgat

Banjart

Steen-banck

Oester-banck

Pascaart vande Gaten van Wielinge

Duytsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graedt

Eñ: en Fr: mijle 20 in een graedt

De Bruggelingen

Liswegen

Oostende

Calgeschorren

Blanckenberge

Schans

Wendunme

Schor van Blanckenberge

De Keut

Hart sandt

Ript hart sandt

Vterbanck

Met Previlegie der Ed. H. M. Heeren Staten generael voor thien jaren.

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CHAP. V.

Of the Zealands Chanels in the VVielings.

THE Channell betwixt the Iland Walcheren and Flanders, having divers deepes and channells, where men may saile in and out through with great shippes, as the Botkill, the Doorloye, the Spleete, and the Wieling. It is commonly called after one of the chiefest of the same, with the name of the Wielings. The greatest showlds, betwixt which these foresayd channels doe runne through, are: The Rasses, the Raen, the English Polle, and the Inner-banck. The Rasses lye alongst the west side of Walcheren: The Raen to the westwards of it: The English Polle betwixt them and the coast of Flanders, lying off to the westwards with a long small ribbe, unto thwart of Oostend. The Inner-banck lyeth betwixt the east end of the English Polle, and Casant, which is also called the French Poll, or the Ript.

The Rasses
The Raen
The English Poll.
The Frech Poll.

The Botkill.

FOR to saile out at the Botkill, you must run from Flushing within two kables lengths alongst by the shore, through betwixt the land & the Geer and the Rasses, the shore is very steepe, so that men may come close by it with great shippes, without any danger, the Rasses are flat on the east or the inner side towards the land. To the eastwards, or to the southwards of Souteland in that fareway it is five and sixe fathom deepe, but to the northwards, or to the westwards it is deeper, and thwart of Westcappell eight and nine fathom.

When the Church of Westcappell (which hath a flat steeple) cometh over the mill, thwart of that runneth a channell through betwixt the norther and easter Rasses westsouthwest into the sea, where remaineth at low water no lesse then two fathom water, keepe Westcappell and the foresayd mill one in the other, and runne out so by them. When Buyens Church commeth over the foresayd mill of Westcappell, then keepe them one in the other, and you shall runne then right out at the Botkill, through betwixt the norther Rasses on the larbord side, and a sand called Calloo on the starbord side. In the Botkill is not lesse then foure fathom and a halfe depth, but upon both the Rasses remaineth at low water, no more then two foote and a halfe, and upon Callo three or foure foot.

Marcks of the Botkil.

Calloo.

To the northwards of the sand Calloo lyeth yet a plate called the Querens, lying to the northwards almost until thwart of Domburgh, betwixt them both is a channell of foure or five fathom depth, called the Easter-gat; For to saile out there, or to finde it comming in out of the sea, you must bring Westcappell to the northermost head, which is a head very good to bee knowne, and run out or in thereby. Betwixt the Querens and the land goeth out yet a Land-deep of three fathom and a halfe. For to finde that comming in out of the sea, you must runne to the shore thwart of Domburgh (which is a sharp steeple) into three fathom, or two fathom and a halfe, and keepe the sounding of the shore so neare as you please, and runne in so alongst by the heads, until you be come within. When you come in at any of these channels, and are come so farre to the eastwards, as betwixt Buyens Church and Souteland, and that you must turne to windwards with an easterly winde, then you may saile through betwixt the easter Rasses, and the plate to the eastwards of it, called the Geere, and so come out in the broad channell into the Doorloy and Splete, and run so about to the southwards of the Geer unto Flushing.

Querens.

Land deep

The Geer.

About two leagues without the land of Walcheren, lyeth a long small banck, lying southwest and northeast, called the Stone-banck, upon the middest whereof there is no more then two fathom, and upon the northend of it three fathom water. He that will saile in or out at the Botkill, or the channels to the northwards of it, to wit, the Eastergat or Land-deepe, must saile about either to the northwards or to the southwards of that Stone-banck: When Middleburgh cometh over Domburgh, then are you thwart of this Stone-banck; but if you bring Middleburgh halfe wayes betwixt Domburgh & Eastcappel, and saile so to the land, then you runne alongst to the northwards of it. Or els if you bring Westcappell eastsoutheast from you, in a black valley of the sand-hills, and saile so right in, then you runne alongst to the westwards or the southwards of it. Within the Stone-banck it is againe eight, nine, and at some places ten fathom deepe. Vpon the foaesayd markes and course, to wit, West cappell eastsoutheast from you in the black valley, you may saile right in at the Botkill: when that Eastcappell commeth then somewhat through Domburgh or to the eastwards of it, then you shall get deeper water; goe then towards the shore, and so alongst by it, as is before sayd. A litle from the southwest end of the Stonebanck, lyeth yet another, but it is not long, called the Oyster-banck, upon it remaineth at low water about foure fathom water.

Stonebank

Markes of the Stonebanck.

Oysterbanke.

The Doorloy.

FOR to saile from Flushing out at the Doorloy with shippes that draw much water, you must set saile when the water is flowed an houre or two, for to come with halfe flood, or against the highest water to the showlds, goe from

Fluſhing firſt alongſt by the ſhore, & then weſt-northweſt, untill that Weſtcappell come within two ſhippes length to the poynt of the ſand hils, to wit, that Weſtcappel ſtand ſo much within the weſt point of the ſand-hill, bring that alſo not further out, nor neerer to the poynt of the ſand-hills, for els you ſhould ſaile upon the Raen. When that Weſtcappell ſtandeth ſo, and S. Anne (a flat ſteeple in Flanders to the vveſtwards of Sluce) ſtandeth amongſt the eaſt ſand-hills of Caſant, then goe northweſt and by weſt out at the Doorloy. When that S. Anne commeth then to the weſtwards of that foreſaid ſand hill, then commeth the caſtle of Sluce, under or behinde that ſand-hill, keepe that under there, or right to the eaſt ſide of the foreſayd ſand-hills, and then go out northweſt and by weſt, and you ſhall goe cleare of the Raen and the Raſſes. If you bring Weſt-cappell without the ſand-hils before that S. Anne come vvithout the foreſayd ſandhills of Caſant, then you ſhall be too farre to the northwards, and too neer the Raſſes. Or if you bring S. Anne without the ſand-hils of Caſant, before Weſtcappel come to the end of the ſand-hills, then you ſhall be too farre to the ſouthwards, and ſhall come againſt the Raen, but vvhen you bring Weſtcappell to the poynt of the ſand-hill, and S. Annes without the ſand-hills of Caſant one as ſoone as the other, then you are amid the channell of the Doorloy right in the fareway.

For to find the Doorloy coming in out of the ſea,

For to find the Doorloy coming in out of the ſea, you muſt run to the Raen by the lead, untill that Weſtcappell come within a maſts length neere to the Sconce, and ſaile ſo right in, or take the ſounding of the Raen, and run alongſt by it untill that S. Anne come to the foreſayd eaſt-ſand-hill of Caſant, then go in alongſt ſoutheaſt and by eaſt, and you ſhall ſoon be over the ſhowldeſt, and find deeper vvater, but you muſt reckon well your tydes, for the flood falleth into the Doorloy firſt ſouth (as alſo the after-ebb) afterwards ſ.ſ.e. and at laſt to the ſouthwards. Therefore if you will goe in at the Doorloy vvith a fore-flood, you muſt goe at leaſt eaſtſoutheaſt, or els (if you ſhould go in upon your direct courſe) you ſhould lightly be carried againſt the Raen. Coming then out of the ſea alongſt by the Raen, untill that S. Anne be hidden amongſt the ſand-hils of Caſant, then goe on eaſtſoutheaſt, untill that Weſtcappell come vvithin the poynt of the ſand-hills, and then run boldly right on with Fluſhing. In dark weather men may ſound alongſt by the Raſſes; VVhen that you keep the Caſtle of Sluce to the eaſtwards of the foreſayd ſand-hill upon Caſant, then you cannot take hurt of the Raen, but when the Church of Sluce ſtandeth to the weſt ſide of the foreſayd ſand-hills, then you are thwart of the ſhowldeſt of the Raen.

The Splete.

FOR to ſaile from Fluſhing out at the Splete, you muſt goe on firſt (as is before ſayd) weſt-northweſt, untill that VVeſtcappel come almoſt to the poynt of the ſand-hills, but not without it, or that the ſteeple of Middlebrough come to the Inner ſand-hill, then goe vveſtſouthweſt, and then you run out at the Splete, which is more then a great halfe league broad, and at low water upon the ſhowldeſt foure fathom and a halfe deepe. Betwixt Soutland and Dyſhoeck lyeth a high ſand-hill, vvhich is at the eaſt end ſomwhat ſteepe, called the Doorne-hill, to the eaſtwards of it lyeth another ſand-hill vvhich is ſomewhat long, not altogether ſo high as the Doorne-hill vvith a clift or little dale in it, which doth (as it were) divide the long ſand-hill in two ſand-hils, the ſouthermoſt is called the Inner ſand-hill, becauſe that to the ſouthwards of it there are no more high ſand-hils. VVhen that the ſteeple of Middlebrough cometh over that inner ſand-hill, or in that foreſayd clift, & keepe that over it, or in it, then you runne out at the Splete, and can take no hurt neither of the Poll nor the Raen.

Doornhil.

Inner ſand hill.

The Engliſh Poll is ſteepe, but with eaſterly windes men may borrow of it by the lead. The Raen is flat on the Inner ſide as well as on the out ſide, ſo that men may ſound out alongſt by it all the Splete when you cannot haue ſight of the foreſayd markes in darke weather, and it is ſo broad, that men haue an halfe houres worke for to ſayle thwart over it, but the Engliſh Poll is ſo narrow, that men may runne over it vvith foure or fiue caſts of the lead. VVhen that Aerdenburgh commeth without the foreſayd ſand-hils of Caſant, then you are paſt the dry Raen, but it lyeth yet out to the vveſtwards vvith a great flat, ſo farre to the vveſtwards, that vvhen Bridges commeth to the eaſtwards of Blanckenbrough in the Gallowefherds, that are high ſand-hils to the eaſtwards of Blanckenbrough, vvhere in times paſt was vvont a Gallowes to ſtand, then you are paſt all the ſhowlds, and may goe your courſe where you deſire to be. Blanckenbrough hath a flat ſteeple ſomewhat higher (but not ſo thick) as Liſweghen.

English Poll. The Raen.

Marcks of the Raen.

From the end of the Engliſh Poll lyeth a long ribbe (about a ſhot of a caſt peece broad) to the weſtwards, until paſt Oſtend, called the Ript, it is hard ſand, and good anckor ground. When Blankenbrough ſtandeth ſoutheaſt & by eaſt frō you, there is upon the Ript at low water ſixe fathom deep, more to the eaſtwards towards the Engliſh Poll it is ſhowlder, but the farther to the vveſtwards the deeper unto the outerbank thwart of Oſtend. A ſhot of a caſt peece to the northwards of that Ript it is deeper, & ſoft ground. Alſo whē you come towards the ſouth or ſ.e. a ſhot of a caſt

The Ript.

caſt peece over the Ript, it will be preſently a halfe fathom deeper, and ſoft ground, that is, then the channell of the Wielinghe. Therefore when you come out of the ſea, and will ſaile in at the Splete, edge to the coaſt of Flanders, when you are (by your reckoning) paſt Oſtend, and borow to it by your lead, until that you get hard ground, and ſhowlder water, that is then for certaine that foreſayd Ript: having found that in ſixe, ſeven, or eight fathom, according as you ſhal be to the eaſtwards or the weſtwards, then edge off againe to the northwards into the ſea, untill it begin to ſhowld, and be hard ground; keep ſo the ſounding of the Ript untill that you find again deeper water and ſoft ground, run in then eaſtnortheaſt, and edge now and then to the ſouthwards, towards the north ſide of the foreſayd Ript, untill that Bridges cometh to Liſweghen (being a flat and very thick ſteeple) or that Blanckenbrough ſtand ſouth from you, then you come thwart of the point of the Raen into the Splete. Then bring the ſteeple of Middlebrough over the foreſayd Inner ſand-hill, betwixt Soutland & Diſhoeck, and run in right with it, e.n.e. on, untill that the Caſtle of Sluce come to the eaſtwards of the foreſayd eaſt ſand-hills of Caſant, ſaile then right on vvith Fluſhing, and ſo you ſhall goe cleare both of the Raen and the Polles. If it ſhould happen in dark or miſty weather, that you cannot ſee Middlebrough, then run in by your lead alongſt by the north ſide of the Ript eaſtnortheaſt, until that you find ſhowlding and hard ground of the banck, and ſo you ſhall run in betwixt the Raen and the banck. The weſt end of the Rane is flat, which you may ſound very well. In the channell betwixt the banck, or Engliſh Poll, and the Raen, it is ſoft ground on both ſides, as well towards the Raen as towards the banke, it doth begin to ſhowld, and to be hard ground. When Heyſt, that is, a high ſharp ſteeple commeth to the fire-beacon, thwart of that is the banck, or Engliſh Poll at the ſhowldeſt, to the eaſtwards of that, the banck waxeth deeper; Being come paſt the ſhowldeſt, if you edge towards the banck, you ſhall finde deeper water, and may runne over there at halfe flood with 18 foot, but it is not good to do it, for not to faile upon the French Poll, but keep all alongſt the ſounding & hard ground of the banck, and ſhape your courſe a litle more eaſterly for to avoyd the Raſſes, which lye thwart of Soutland, and are ſteep. When you are come ſomewat further in, goe then eaſt on towards Fluſhing, and you ſhall not come neere any ſhowlds. Thwart through the Raen goeth a Slenck where remaineth at low vvater, not leſſe then two fathom and a halfe water; for to find it coming in out of the ſea, you muſt bring Aerdenburgh a litle without the poynt of the ſand-hils of Caſant, or Weſtcappel in Flanders a litle to the eaſtwards of Knock, ſaile then right with it, until that you get deeper water, or that the ſteeple of Middlebrough come over the inner ſand-hill, and then in alongſt with it. Weſtcappel in Flanders is a ſhort flat litle ſteeple, with a litle ſhort blunt ſpire, or cap upon it, but Knock is a ſharp ſteeple, not ſo high as Heyſt.

Slenck through the Raen.

The Wielinghe and Inner-wielinghe.

FOr to ſaile in at the Wielinghe coming in out of the ſea, you muſt runne on to the coaſt of Flanders, (when you are paſt Oſtend) untill you come in 5 fathom. Thwart of Blanckenbrough there was wont a few yeares paſt, to lye a banck or ſhare off from the ſhore, vvhich men might ſaile within, coming from the weſtwards: now there is nothing but a litle flat, and Dobbelſand is alſo altogether cleane gone. Or elſe you muſt look out for Liſweghen a flat ſteeple, & the thickeſt thereabouts. When the ſteeples of Bridges, (being called the Brugghelinghen) ſtand a cables length to the vveſtwards of Liſweghen, then are you yet to the vveſtwards of all the ſands, polles, and bancks, keepe theſe ſteeples ſo ſtanding, and run on to the coaſt, untill you come over the foreſaid Ript, and that you finde againe ſoft ground, and more depth, untill you come in fiue fathom, go then northeaſt, & northeaſt & by eaſt with a flood, or northeaſt and northeaſt and by north vvith an ebbe, (reckon vvell your tydes, vvhich runneth there moſt e.ſ.e. ſomewhat ſoutherly, and w.n.w. ſomewhat northerly, and the tyde runneth but a litle houre alongſt the land) keep the ſteeple of Wenduynen one or two ſhips lengths without the Sconce of Blankenbrough, ſo long as you can ſee them, & ſtill in 5 fathom; vvhen that Heyſt cometh then to Bridges, and Weſtcappell to Knock, then are you right in the fareway of the Wielinghe, the neerer that you are to the banck of the Engliſh Poll, the deeper vvater you ſhall find, except that you haue the ſhowlding of the banck it ſelfe. Bridges muſt come firſt to Heyſt, or els you ſhould be too far to ſeawards, or too neere to the Engliſh Poll; vvith a fore-flood you may bring them both at once together, but not vvith a fore-eb. If you get then ſhowlding, that is, of the Engliſh Pol, go frō thence alongſt the ſame courſe, through betwixt the Engliſh Poll and the French Poll, or Inner-banck, that is, a hard ſand and ſteep, but the Engliſh Poll is thereabouts flat, which you may ſound. When as that the caſtle of Sluce cometh to S. Lambert (a high flat ſteeple upon Caſant, to the northwards or to the eaſtwards of the Sluce) then you are paſt the French Pol, go then eaſt on right with Fluſhing, or els obſerue theſe marks following: Liſweghen muſt not come within Heyſt, before the caſtle of Sluce come to the eaſt ſandhil of Caſant, but remain without it, or els you ſhould ſail on againſt the Inner-banck,

Markes of the French Poll.

when as that the Caſtle cometh then to the ſand-hill, goe then boldly northeaſt and by eaſt, & eaſtnortheaſt, for to avoyd the French Poll, untill that the ſteeple of Fluſhing come to the northwards of the priſon gate, then you get deeper water: goe then on eaſt, and eaſt and by ſouth right with Fluſhing. There remaineth in the Wieling, as alſo in the Inner-wieling at the loweſt water, not leſſe then four fathom and a halfe water.

The Inner Wieling.

The Inner-wieling lieth in through betwixt the Inner-banck, or French Poll, and Caſant. When you come from the vveſtwards into the Wieling, and are come ſo farre, that Weſtcappell come to Knock, and will goe in at the Inner-wieling, then goe from thence eaſt end by ſouth on, and you ſhall eſpy the buye upon the poynt of the Paerdemarckt, (that is, a ſand that ſhooth off from the eaſt poynt of Sluce haven, and is very ſteepe) leaue that buye on the ſtarbord ſide, and keepe S. Lamberts ſteeple even vvithout the eaſt ſand-hills of Caſant or Sluce haven, and goe on northeaſt or ſomewhat more northerly alongſt by the ſhore, for to avoyd the Krakeſand, vvhen as then the Caſtle of Sluce and S. Lamberts ſteeple come one in the other, then goe on eaſt right with Fluſhing.

Krake ſand

Of the tydes, and courſe of the ſtreames.

BEfore the Wielings a ſouth and by vveſt, and a ſouthſouthweſt Moone, maketh the higheſt water.

At Fluſhing and Ramekens a ſouthſouthweſt Moone.

At Weſtcappell on the land of Walcheren, a ſouth and north Moone maketh high water. When the vvater is a halfe houre fallen, then the tyde beginneth to fall out there, and when it is flowen a halfe houre, it beginneth to fall in: but before the Botkill it beginneth to goe there firſt an houre before the loweſt water, but it falleth long at ſea. In the Splete, and over the Showlds lying thereabouts, the tyde turneth about againſt the Sunne, and at laſt falleth in at the channels. A ſouth and north Moone maketh there the higheſt vvater. The fore-flood falleth over the ſhowlds there towards the land. When the Moone is about eaſtſoutheaſt, or that the vvater be about two houres flowen, then it beginneth to turne towards the ſouth, firſt ſouthſouthweſt, and then paſt the ſouth towards the eaſt, untill that the Moon be ſouthſoutheaſt, and then the flood falleth to the eaſtwards. When Blanckenbrough ſtandeth about ſoutheaſt and by eaſt from you, from thence to the eaſtwards the tyde turneth about againſt the Sun, but from thence to the weſtwards, you ſhall not finde the tydes to turn about.

Againſt Zealand in the fare-way a third part of the flood falleth towards the land, and afterwards eaſt and by north. Men may ſee Zealand from the Poope in 16 fathom.

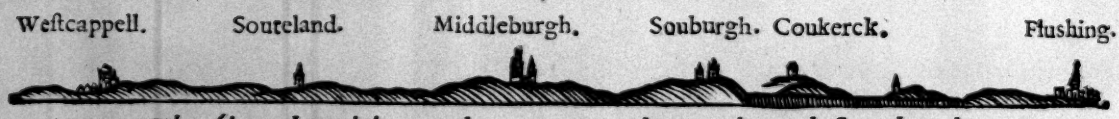
Courſes and Diſtances.

FRom Fluſhing to Blanckenbrough neareſt vveſtſouthweſt, 9 leagues.
From Blanckenbrough to Oſtend ſouthweſt and by vveſt, 2 leagues.
From Fluſhing to the north Forland, vveſt ſomewhat ſoutherly, 25 leagues.
From the Wielings to Dover vveſtſouthweſt, — — — 26 leagues.
From the Wielings to Layſtaffe or Yarmouth, n.w. and n. w. and by w. 38 or 40 leagues.

Heights.

FLuſhing, Ramekens, and the ſouth coaſt of Walcheren lye neere in 51 degrees and a halfe.

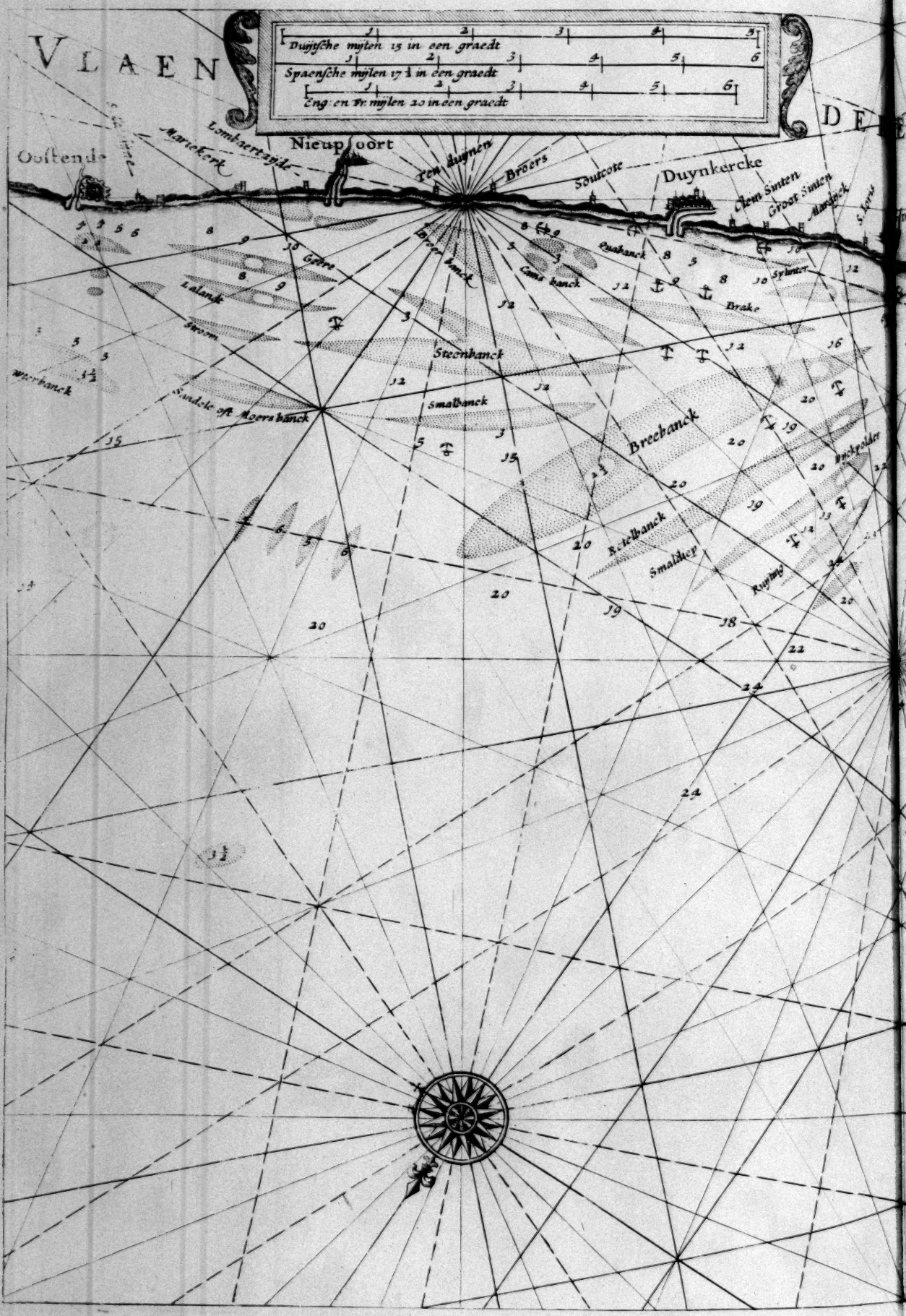
Hovv theſe lands doe ſhevv themſelues at ſea.



Thus ſheweth Walcheren when you are in the Doorloy, or before the Splete.

Thus ſheweth the coaſte of Flanders from Blanckenbrough eaſtwards, when you ſaile in or out at the Wielings.

C


VLAEN
DE
Duytsche mylen 15 in een graedt
Spaensche mylen 17½ in een graedt
Eng: en Fr: mylen 20 in een graedt
Oostende
Mariekerk
Lombaertzijde
Nieuwpoort
Ten duynen
Broers
Duynkercke
Clein Sinten
Groot Sinten
Mardyck
Oyebanck
Sylmer
Brake
Coms banck
Broer banck
Gelte
Lalanck
Stroom
Steenbanck
Smalbanck
Breebanck
Ruytelbanck
Smaldiep
Wickepolder
Sandicke oft Noorrbanck
24
22
20
19
18

GALLIÆ

Boloigne
Beunen

d'Oude man
Tour d'ordre

PARS

Ambleteul

Calles

Calles Clif

Swartenes

Vrouwesant

Duynes

Sandwich

Goeyngh

Querens

t Voorlandt

Margat

ENGELANDT.

De Cust van Vlaenderē en Engelandt van Oostende tot deur de Hoofden

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CHAP. VI.

The coaſt of Flanders from Sluce through the Heads, or the Straite betvveen Callice and Dover.

FLANDERS is a land ful of ſand-hills and hommockes, with many ſteeples alongſt the coaſt, lying from the haven of Sluce unto Callice, moſt weſtſouthweſt, and eaſtnortheaſt. The firſt ſteeple to the weſtwards of Sluce is S. Anne a flat ſteeple, next is Knock a ſharpe ſteeple, and then Weſtcappell a litle ſhort flat ſteeple, with a blunt cap upon it. Heyſt to the weſtwards of them is a long ſharpe ſteeple higher then Knock. Betwixt Heyſt and Blanckenbrough, lyeth Liſweghen ſomewhat within the land, that is a flat ſteeple, & the thickeſt of all the ſteeples thereabouts. Blanckenbrough is alſo a flat ſteeple higher then Liſweghen, but not ſo thick. Within the land from Blanckenbrough, ſtandeth Bridges, two thick, ſharpe ſteeples upon one Church; to the vveſtward of Blanckenbrough a great halfe league, lyeth Wenduynen a ſharpe ſteeple. Betwixt Wenduynen and Blanckenbrough ſtandeth an other little ſteeple called Iohn Davids ſteeple. Oſtend lyeth a great league to the weſtwards of Wackerbout. A halfe league to the vveſtwards of Oſtend, lyeth S. Catharines, and a league to the weſtwards of it is Middlekerck, being a high thick flat ſteeple. From Middlekerk to Newport it is two leagues, there is a flat ſteeple, with a litle ſharpe ſteeple. A litle to the eaſtwards of Newport lyeth our Lady of Lombardy, a high flat ſteeple.

From Newport to Broers it is two leagues, and from Broers to Dunkerck three leagues. The Soutkoten is a league to the eaſtwards of Dunkerck. Dunkerck hath a high flat ſteeple, with a little ſharpe ſteeple. From Dunkerck to Graveling are three leagues, betwixt them ſtand theſe ſteeples, firſt litle Sinten a litle ſharp ſteeple, great Sinten a thick flat ſteeple, Maerdyck a thick flat ſteeple, and S. Georges a high ſharpe ſteeple. Graveling hath no ſteeples, but there ſtand two milles, one on the Eaſter gate, and the other on the weſt end of the town. From Graveling to Callice are three leagues. Callice hath many ſharpe ſteeples, wherof one is higher then all the reſt, and betwixt both lye theſe villages moſt vvithout ſteeples. Firſt Hooghenpryſe and Daſen, two flat ſteeples; more Valdam a flat Church with a little ſpire upon the middeſt of it, that is all the knowledge of Flanders. The coaſt of Flanders betwixt Callice and Blankenbrough, is foure and twenty leagues long, or as ſome ſay, one and twenty leagues, and Blankenbrough from Fluſhing nine leagues. So that Fluſhing is from Callice, at the leaſt 30 leagues, or as ſome ſay, three and thirty leagues at the moſt.

That which is here ſayd of the ſteeples and leagues alongſt the coaſt of Flanders, is very ſerviceable and needfull as well for that vvhich is before deſcribed of the Wielings, as alſo for the ſayling into the havens of Flanders, but eſpecially for the knowledge of the Flemiſh banckes.

Oſtend. For to ſaile into Oſtend, you muſt run cloſe to the eaſtwards of the towne into the haven called the Gueule, on the eaſt poynt of the haven lyeth a head, whereupon ſtandeth a beakon, you muſt run cloſe in by that head, there it is deepeſt. From the vveſt ſide, to wit, towards the towne, ſhooteth off a litle flat, therefore you muſt avoyd that ſide a ſhippes length or two, at low water and a common tyde remaineth in this havens mouth ſixe foot, and at high vvater there is two and twenty foot water. A litle vvithin the haven you may anckor vvhere you will, and at low vvater you may lye there with a great ſhippe a floate.

Newport. Newport is a tyde-haven which falleth altogether dry at low water, and at high vvater, & a common tyde there is thirteen foot water, cloſe before the havens mouth is a banck, vvhich lyeth frō the eaſtwards of the haven of Newport over to the weſtwards, thwart before the havens mouth, and at halfe flood lyeth dry, and at high vvater there cometh no more upon it then eight foot vvater. He that will go into Newport, muſt goe in from the weſtwards betwixt the foreſayd banck and the land, and ſayle in to the ſouthvvards of the bank ſo long untill that the innermoſt beacon come even through, or to the eaſtvvards of the outermoſt, and then run in ſo right by them, and in alongſt amidſt the channell betwixt the heads. Betwixt the banck and the land it is on both ſides flat riſing ground, ſo that you may ſound the ſhores on both ſides, but one the north ſide the banck is ſomewhat ſteepe, it is three fathom deepe cloſe alongſt by it. Within the havens mouth it is ſet on both ſides of the deepe vvith beacons, vvhere you muſt runne through betwixt untill you come before the towne, vvhich lyeth about a cannon ſhot from the ſea ſide. There is fired in the night upon the two great beacons, but not longer then from halfe flood to halfe ebbe.

For to ſaile into Newport.

From Newport to Dunkerck alongſt by the ſhore, through vvithin the banckes, it is cleane vvithout any fowle ground or banckes, and at low water fifteen foot deep, the neerer the ſhore the deeper. Thwart of the Cloyſter Ten Duynen betwixt it and Broers banck, it is narroweſt, vvhich lyeth not farre from the ſhore, thwart of it you muſt goe cloſe alongſt by the ſhore.

Quade banck. The Quade bank runneth off to the eaſtwards

of the head of Dunkerck, at leaſt two leagues to the vveſtwards ending thwart of the heads of Dunkerck. To the eaſtwards of the eaſter head of Dunkerk men may anckor behind this banck, and lye ſheltred for a northweſt, north, and northeaſt winde, it is two fathom deep there at low water, but in the comming in, it is ſhowlder. Before the havens mouth of Dunkerck it is nine and ten fathom deepe, and to the vveſtwards of the vveſter head of Dunkerck, ſixe, ſeven, and eight fathom, from thence men may runne over the Small banck in three fathom, & come againſt the Broad banck. This Small banck lyeth right thwart before the haven of Dunkerck, to wit, betwixt Dunkerck and the Broad banck.

Small banck.

For to ſaile into Dunkerck.

For to ſaile into Dunkerck, you muſt bring the fires within a capſtone barres length one to the other, to wit, the innermoſt ſo much to the eaſtwards of the outermoſt, keep them ſo, and runne in then cloſe alongſt by the eaſter-head, the vveſter head lyeth ſomwhat further off into the ſea then the other, thwart of it lyeth a ſandplate with ſome pales, therefore you muſt avoid it, and runne in cloſe alongſt by the eaſter head. It is a narrow haven, and at high water & a common tyde there commeth no more then twelue foot water. In the night they doe fire there as at Newport, from halfe flood to halfe ebbe, and the loweſt fire-beacon ſtandeth next unto the ſea.

The Splinter.

From the vveſter head of Dunkerck runneth off a banck about two leagues long, called the Splinter, vvhich falleth drye at low vvater at many places, men may ſaile in by the ſhore behinde this banck from the vveſtwards almoſt to the vveſter head of Dunkercke, and there may come to an anckor in fiue, ſixe, ſeven, and eight fathom. About halfe a league from the foreſayd vveſter head, there runneth a Slenck through the foreſayd banck, vvhere litle ſhippes may goe through at high vvater.

Graueling

Graueling is alſo a tyde-haven, where men muſt goe in at high vvater, there ſtand two beacons, vvhich you muſt keepe one by the other, and ſaile ſo in betwixt the heads, on the weſt ſide runneth off a litle riffe, vvhich you muſt avoyd. When you come from the eaſtwards alongſt the coaſt running through Wolbrech ſound, at the end of the Brakes, (that are the banckes before Dunkerk, and from thence vveſtwards) then you come againſt the vveſt poynt of the foreſayd litle riffe or out-ſand of Graueling, vvhich lyeth a good vvayes off into the ſea, to the eaſtwards of it men run into the haven of Graueling by night right in with the fires.

To the vveſtwards of the haven of Graveling lyeth a banck or flat alongſt the the ſhore, lying a good wayes off from the land to ſeawards, almoſt as farre to the weſtwards as Callice, called the Newland, men may runne alongſt by it, or over it in fiue, foure, and three fathom, according as men will.

Callice.

The haven of Callice falleth every tyde altogether dry, and at high water with a common tyde there is no leſſe then three fathom water. For to ſaile in there you muſt keepe the mill (ſtanding on the eaſt corner of the towne) right over the eaſter head, and runne in ſo cloſe alongſt by the eaſter head, and let the caſtle lye on the weſt ſide of you, from the vveſter head runneth off a litle riffe, therefore you muſt avoyd it. When you are come in vvithin the weſter head, you muſt go up to the weſtwards into Paradice, and there lye dry at low water. By night when the tyde ſerveth, there ſtand two fires, you muſt runne in right with them. It is not good to come into this haven before high water, becauſe of the exceeding ſtrong tyde that runneth in there with the flood, for to avoyd the anckors of the ſhippes, which lye there within. It is there within dangerous and bad lying, eſpecially vvith a northerly winde, vvhich bloweth there open in.

Callice-cliffe.

Thwart off from the vveſter head of Callice lyeth a banck of two fathom, betwixt the Head or Meyland, and the ſame banck men may run through in three fathom at halfe flood, the bank is two fathom deepe. Vnder Callice cliffe at the eaſt end, men may anckor in ten fathom, but at the weſt end lyeth a rock under water, a baſe ſhot from the land. Callice Cliffe lyeth betwixt Callice and Blackneſſe.

Of the Flemiſh banckes.

The Tricx

VVEſt from Weſtcappell, and northweſt from Oſtend, about nine leagues without the coaſt of Flanders, lieth a litle plate, wherupon at low water is no more then two & twenty foot water, in fowle weather the ſea breaketh very much upon it.

About two leagues from Oſtend vvithout the land lyeth the Tricx, or outerbanck, upon it there is no more then fifteen or ſixteen foot water. When S. Katherines ſteeple cometh againſt Oſtend, then you come on againſt this banck: betwixt this banck and the Heads of Oſtend, lyeth another banck of three fathom water.

Betwixt Oſtend & Newport lye foure banks, all which foure begin about thwart of Oſtend, the two neereſt to the land end thwart of Newport. The other lye all alongſt the land almoſt to Dunkerck: the firſt and neereſt to the land is called the Geere, betwixt that and the land goeth a channell through of eight, nine, and ten fathom.

The Geer.

Laland.

The ſecond called Laland, endeth alſo againſt Newport, betwixt theſe two goeth a channell through of eight and nine fathom.

The third are two banckes one to the other, the

the eaſtermoſt ending halfe vvayes : Laland is called Stroom, the vveſtermoſt ending thwart of Dunkerck, is called the Stonebank, vvhich hath on the eaſt ſide a hooke, vvhich lyeth to the eaſtwards, running to nothing almoſt againſt Newport: this banck is three or foure fathom, and upon the eaſt end fiue and ſixe fathom.

Stroom.
Stonebank

The fourth is is alſo in two bancks, the eaſtermoſt is called Sandele, or Oudemoers bank, and the vveſtermoſt Calbanck, of ſome called alſo Small-banck, vvhich lyeth alongſt by the Broad-banck: but that outer end lyeth at leaſt two great leagues off.

Sandele.
Calbanck.
Oudmoers banck.

The ſhippes that vvill goe before Dunkerk, and cannot get alongſt by Flanders, do runne about vvithout theſe bancks, until they come againſt Broad-banck, and then run in alongſt by it in fiue or ſixe fathom. The channell is fifteen fathom deepe, and every one of theſe foure banckes hath a drye Polder. When two ſteeples (that are ſomewhat flat to the ſouthwards of Newport) ſtand a handſpikes length aſunder, then are you thwart of theſe foure banckes here before mentioned, vvhich are not deeper at low vvater then one fathom, and at Spring tydes fal almoſt dry.

Betwixt all theſe banckes you may anckor in nine, ten, eleven, and alſo in twelue fathom, you may runne over them in foure fathom, but vvhen you are to the vveſtwards of them, you ſhall finde it deeper, to wit, eight, nine and ten fathom.

The Broers banck is three cornerd, and lyeth cloſe by the land thwart of Broers and the Cloyſter Ten Duynen, and lyeth off from the ſhore about vveſtnorthweſt a league into the ſea, vvhen the Cloyſter ten Duynen, or the Broers lyeth ſouth from you, then you are at the innermoſt part of the Broers bancke; you may runne through betwixt the land and this banck, in foure fathom at low vvater, but men doe runne commonly about to the weſtwards of it, when they ſaile through vvithin the banckes, alongſt the coaſt of Flanders.

Broers banck.

A little to the vveſtwards of Broers banck lyeth the Cams banck, which is three fathom deepe, and lyeth in many Raſſes, you may runne through betwixt the land & this banck alſo in eight, nine, and ten fathom, and alſo may ride there for all vvindes. By the land, betwixt this banck and Broers banck, it is fiue fathom deepe. When you runne through betwixt this banck and the land, then you come alongſt by the Quade banck untill you come before the haven of Dunkerck. When you are a good wayes paſt the head of Dunkerk, about ſouthweſt from the Splinter, then you runne over a ſhowld of two fathom, called Wilbaert ſound; being over it you ſhall haue againe ten, eleven, and twelue fathom. When Borburgher ſteeple commeth in the valley of the ſand-hill, then you are thwart of this bank, by theſe markes you may ſaile through theſe banckes northnorthweſt into the ſea, & come againſt the taile of the Broad-banck in foure fathom. When as that you doe edge againe ſomwhat towards the land in twelue, thirteen or fifteen fathom; then you may ſaile through betwixt the Broad and the Small banck, on eaſtnortheaſt, or eaſt and by north untill you be paſt the Cloyſter Ten Duynen, or the Broers banck, vvhich lyeth off from the Cloyſter about a league into the ſea. To the eaſtwards paſt this banck it beginneth to be ſhowld vvater againſt Newport foure or fiue fathom, being paſt Newport, you muſt edge towards the land, in eight or nine fathom, keeping cloſe to the land, and then you ſhall runne through betwixt the land and the Geere, (vvhich lyeth alongſt towardes Oſtend.) When you come againſt Oſtend, then you are cleare of the banckes, and then you may runne into the ſea for to goe into the Wielings.

Wilbaert found.

There lye yet fiue long banks alongſt Flanders. When Graueling is ſoutheaſt from you, then you are thwart of the ſouth end of theſe banckes: and vvhen Newport is ſoutheaſt from you, then you are thwart of the north end of them, they are very long, and betwixt each goeth a vvyde channell through of eight, nine, twelue, fifteen, ſixteen, eighteen, nineteen, and twenty fathom deepe, each of a ſeverall depth.

Markes of the Flemiſh bancks.

The outermoſt or vveſtermoſt banck called the Cliffe, lyeth from Callice cliffe northnortheaſt about foure leagues and a halfe, and is three fathom and a halfe deepe: betwixt this and the other goeth a wyde channell through of three and twenty and foure and twenty fathom deepe.

The Cliffe.

The ſecond called the Ruyting, lyeth from Callice cliffe northeaſt and by north about foure leagues, and is there fiue or ſixe fathom deepe, but upon the ſouth end of it is a Polder of a fathom and a halfe. When the ſouth end of Winocxberghen commeth betwixt the two flat ſteeples to the weſtwards of Dunkerck, then are you thwart of this Polder.

The Ruyting.

There ſtand three or foure milles to the eaſtwards of Dunkerck, when the outermoſt commeth over the eaſt end of the towne, that is alſo a good mark of this Polder, or ſhowld, and then the ſteeple of Dunkerck ſhall bee from you ſoutheaſt fiue leagues.

Betwixt

Betwixt this and the third goeth alſo a chanell through of 12 and 13 fathom.

The Dyke. The third, called the Dyke, lyeth from Callice Cliffe northeaſt, and is deepe foure and fiue fathom, upon the ſouth and north end of this banck are Polders, the ſouthermoſt is deepe one fathom, and lyeth alſo upon the markes of Winocxberghen about northweſt ſomwhat weſterly from Dunkerck, and is called the Polder of the Dyke, or Dyke-polder, the other Polder or ſhowld of this banck is about foure fathom and two foot deepe, and lyeth northweſt from the Cloyſter Ten Duynen. Theſe banckes are very dangerous; for the Ruyting lyeth almoſt in the fare-way, and at low water they haue no more then two fathom depth.

Kettell-banck. The fourth banck, called Kettell-banck, lyeth from Callice cliffe northeaſt and by eaſt and is deepe, three, foure, fiue, and ſixe fathom. Vpon the ſouthend is a ſhowld of one fathom vvater at low water, at Spring tydes theſe Polders fall dry. Alongſt by this goeth alſo a chanel through of nineteen and twenty fathom.

To the eaſtwards of the Kettel-banck, to wit, betwixt that and the Broad-bank, goeth through a great channell of nineteene and twenty fathom.

In all the chnnells betwixt the foreſaid banks, men may turne to windwards every where from one banck to the other, and anckor betwixt the bancks where they will.

Broad-banck. The ſouth end of the Broad-banck lyeth from Callice cliffe eaſtnortheaſt, and hath one ſhowld upon the ſouth end of one fathom and a halfe, is throughout three and foure fathom deepe.

The northend is deepe ſixe, ſeven, and eight fathom, and lyeth ſo farre to the northwards, untill Newport be Northweſt from you, or the Cloyſter ten Duynen be northnorthweſt fiue or ſixe leagues from you.

The coaſt of England from Dover to the north Forland.

BEtwixt Callice & Dover amidſt in the fare-way, (or ſomewhat neerer the French ſide then the Engliſh) lyeth a narrow banck of foure leagues long, lying about northnortheaſt and ſouthſouthweſt alongſt the land of Blackneſſe, being called the Vaen, and by the Dutchmen called Vrouw-ſand, of fiue, ſixe, ſeven and eight fathom depth, and runneth to the ſouthwards, towards the land of Bulleyn. Weſt and by ſouth from Callice cliffe, and ſouth and ſouth and by eaſt from Dover, is the ſhowldeſt of it, at low water not deeper then ſixteen or ſeventeen foote. On both ſides of this banck, as well alongſt to the eaſtwards as to the vveſtwards of it, is 20, 22, 23, and 24 fathom deepe. Men may anckor before Dover for a north and northweſt vvinde, right againſt the Caſtle in ten fathom is the beſt road and clean ground. For to ſaile into the Downes from the ſouthwards, you muſt runne about by the ſouth Forland, vvithin two cables lengths alongſt by the land, and anckor thwart of the middlemoſt Caſtle in ſeven or eight fathom.

The ſouthermoſt poynt of Goodding, and the ſouth Forland lye northeaſt and ſouthweſt aſunder. Goodding

Betwixt Goodding and the Valley in the land of the north Forland, called Ramſgat, lye two ſhowlds, whereof the vveſtermoſt is called the Quernes, and the eaſtermoſt the Brakes.

For to ſaile from Dover (through within the the Goodding, betwixt the Goodding and the Brakes) to the north Forland, you muſt goe on north and by eaſt ſo long untill that the mill upon the north Forland come to the vveſt ſide of the Valley in the north Forland, then goe yet north and by eaſt, and northnortheaſt, untill that the litle ſteeple upon the north Forland come to the eaſt ſide of the foreſayd valley, then you ſhall be to the northwards of the Brakes, and then the litle flat ſteeple upon ſouth Forland cometh to or right over the third white Chalck-hill to the northwards of the ſouth Forland, that is a direct longſt marke, for to ſaile through betwixt the Brakes and Goodding, as well when you come from the northwards, as from the ſouthwards.

For to ſaile through within the Goodding from the northwards, you muſt not come neerer the Brakes then in ſeven fathom, and ſet the ſouth Forland ſouthſouthweſt from you, and ſaile then ſo right with it, and then you ſhall runne alongſt the beſt deepe. When that the flat ſteeple upon the north Forland ſtandeth in Ramſgat or the Valley, then you ſhall be thwart of the Brakes, and vvhen the mill commeth in Ramſgat, you ſhall be to the ſouthwards of the Brakes. Brakes.

When you lye in the Downes, and that the inner poynt of the cliffe of the ſouth Forland lye ſouthſouthweſt from you, then the Quernes lye north and by eaſt from you, and the north end of Goodding northeaſt from you. Quernes.

The north end of Goodding, and the poynt of the north Forland, lye ſoutheaſt and by eaſt and northweſt and by vveſt a league and a halfe aſunder.

For to come from the northwards into the Downes through betwixt the Brakes and the Quernes: there ſtandeth a Church upon the high land of the ſouth Forland, to the northwards of it, which is a flat ſteeple, and the church ſomewhat great of body, and there are three Caſtles upon the ſtrand of the Downes, you muſt bring the foreſayd Church with the flat ſteeple right in the middeſt betwixt the two ſouther- For to ſaile through betwixt the Brakes and the Quernes.

moſt

moſt caſtles, and then you are in the fare-way in the middle of the channell, and that vvill ſerue for a leading mark to run through betwixt the the Brakes and the Quernes, and the courſe lyeth through ſouthſouthweſt. If the winde bee ſoutherly, that you muſt turne to vvindwards through, runne not further over to the eaſtwards then that the foreſayd Church come vvithin two ſhips lengths of the ſouthermoſt caſtle, for if you ſhould bring them neerer, or together, then you ſhould run upon the Brake, and being caſt about, run not further over to the weſtwards then that the foreſaid church come within two ſhippes lengths of the middlemoſt caſtle of the three, for if you ſhould bring them neerer, or together, you ſhould run upon the Quernes, and theſe markes will ſerue to turne to vvindwards through betwixt the Brakes and Quernes either from the northwards or the ſouthwards. The Brake is ſteep, being 5 fathom cloſe alongſt by the ſide of it, and in the middle of the channell is but 15 foot at low vvater, ſo that it is deeper by the ſide of the Brake, then in the middle of the channell. As you turn to windwards, and run over to the eaſtwards towards the Brake, as ſoon as you come to haue fiue fathom, you muſt caſt about, or els you ſhould be againſt the Brake: the Querne is flat, but nevertheleſſe as ſoone as you finde it ſhowlder (in running over to the vveſtwards towards the Querne) then 15 foote, you muſt caſt about again, and ſo turn through. About halfe a league from the north end of the Goodding to the ſouthwards, lyeth off a flat taile or ſpit of ſand to the weſtwards from the Goodding, a great musket ſhot off, and falleth drye a good wayes off at low water, vvhich maketh the channell there betwixt the Goodding and the Brake very narrow, the thwart markes of this taile of ſand are theſe: up within the land, a litle to the ſouthwards of Ramſgate, ſtand three or foure high trees together, when theſe trees doe come right over the ſouthermoſt end of the cliffe that lieth alſo a litle to the ſouthwards of Ramſgat, then you are thwart of this foreſayd taile of ſand, as ſoon as you ſhall be paſt it, then you ſhall haue more roome to turne to vvindwards, and may run further over to the Goodding.

Thwart markes of a taile of ſand, lying off fró the Goodding

For to ſaile from Dover without the Goodding to the north Forland, you muſt keepe the poynt to the vveſtwards of Dover vvithout the ſouth Forland, and goe on northeaſt untill that the north Forland be northweſt and by vveſt from you, then you may boldly run to the north Forland, and anckor before Margate, or where that you ſhal think it beſt, but thwart of the ſteeple, vvhere the mill ſtandeth by, is the beſt roade. Or when the poynt of the north Forland lyeth ſouthſouthweſt and ſouthweſt and by ſouth from you, there is alſo good riding in eight or nine fathome. Betwixt Margate and the Reculvers, men may anckor every where in ſixe or ſeven fathom at halfe flood.

For to run about a ſeabord of the Goodding.

Betwixt the Querns and north Forland men may alſo run through to Sandwich, there runs off a litle ſtone-banck from the ſhore, called the Fourefoot, betwixt that and the Quernes it is at halfe flood two fathom deepe. The Quernes are lately growne much leſſe, and ſhifted, ſo that the north end of them is almoſt gone.

Of the tydes and courſe of the ſtreames.

ALongſt the coaſt of Flanders on the land, a ſouth and north moon maketh full ſea.

In the fareway without the Flemiſh banckes in the ſea, a ſouthweſt moone maketh high water.

In the middeſt betwixt the heads a ſouthweſt Moone.

At Dover a ſouth and north Moone.

In the Downes a ſouthſouthweſt moone.

At the north Forland a ſouth and north moone.

Alongſt the Flemiſh banckes the fore-flood falleth over the bancks toward the land, about the third part of the tyde, afterwards alongſt the land, but the after-flood falleth to the norhwards alongſt the ſea in the right fare-way.

When the flood beginneth to go there thwart off at ſea, then it is already halfe flood on the land, and the water flowen halfe wayes, ſo that men may goe into all the havens on the Flemiſh coaſt with fiue or ſixe foot water.

In the middeſt through the Heads, the flood falleth northeaſt and by eaſt, and the ebbe ſouthweſt and by weſt.

From Dover to the north Forland the tyde falleth through vvithin the Goodding north and ſouth over the Brakes and Quernes.

Of the depths.

IN the right fare-way betwixt the Marſdeepe and the Heads, it is 23 and 24 fathom deep. A litle without the Flemiſh bankes 18, 19, 20 fathom, but neere Goodding, or about the north Forland, it is 26, 28, and alſo 30 fathom deepe, the neerer Goodding the deeper vvater.

Being thwart of Goodding in 28 or 29 fathom, you ſhall not be two ſhots of a caſt peece from it.

For to ſaile out of the Marſdeep towards the Head, goe not on otherwiſe then ſouthweſt, and ſouthweſt and by ſouth, (but you muſt bee very carefull to take heed of the tydes) when you ſhall reckon to haue ſailed 40 or 46 leagues, then edge over to the Flemiſh bankes, untill you come in twenty or eighteen fathom, vvhen that you are ſure of theſe grounds, then goe on ſouthweſt, and at length ſouthweſt and by vveſt,

and you ſhall come in the middeſt betwixt the heads of Callice and Dover.

Flanders you may ſee from the Poope in 16 fathom, and then you are within the poynt of the Flemiſh banckes.

Callice cliffe and the ſouth Forland, or the poynt of Dover, you may ſee when you are before them in 24 fathom.

Courſes and Diſtances.

From Blankenbrough to Oſtend ſouthweſt and by weſt 2 leagues.
From Oſtend to Newport w.ſ.w. 3 leagues.
From Newport to Dunkerk w.ſ.w. 5 leagues.
From Dunkerk to Graveling w.ſ.w. 4 leagues.
From Graveling to Callice w.ſ.w. 4 leagues.
From Callice to Callice Cliffe ſouthweſt and by weſt 1 league.
From the Heads of Callice and Dover to the Riffe of Iutland northnortheaſt 120 leagues.
From Callice Cliffe to the Naze in Norway, northeaſt and by north 153 leagues.

Heights.

The Heads and Dover lye in 51 degr. 12. min.

Howv theſe lands doe ſhevv themſelues at ſea.

Thus ſheweth the coaſt of Flanders betwixt Oſtend and Newport.

This ſheweth Dover when you ſaile to the weſtwards of the Vaen, or Vrowſand through the Heads.

When you run from the Downes towards the north Forland, then the land ſheweth it ſelfe thus.

Thus ſheweth the coaſt of Flanders betwixt Newport and Callice when you ſaile alongſt by it.

To the Book-binder.

Place the Cards thus.

Numb.		before		fol.
57 and 58	—	—	—	1
59	—	—	—	9
60	—	—	—	15
61	—	—	—	17
62	—	—	—	21

THE

The third parts

SECOND BOOKE

of the

SEA-MIRROVR

of the Weſterne and Southerne

NAVIGATION.

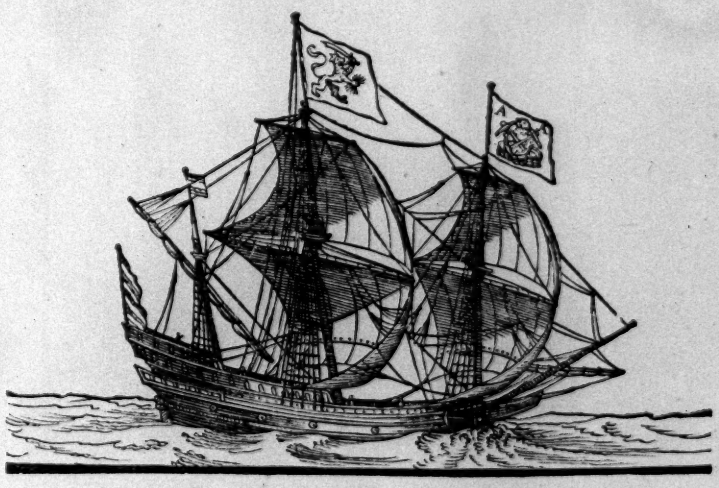
Containing

THE DESCRIPTION OF THE SEA-COASTS OF FRANCE

From Callice unto Vſhant.

AND OF ENGLAND

From Dover about Englands end, to the poynt of S. Davids in Wales.



With priviledge of the H. M. Lords the States Generall of the Vnited Provinces for ten yeares. 1625.

Yerlandt

Tyskar

I. Saltes

Walles.

I. Ramsey

David Brede pak

Pembrock

Scaline

Milford haven

I. Caldy

Warmshoft

Aberman

Cap Rees

Nesgerr

I. Denni

Kingh. road

Egbis point

Engelse grenden

Uphillhaven

Kelwic

Naesslandt

I. Londey

Dumsor

Minhead

Porlock

Porlock bay

Combemartin

Ilfarcombe

Barnestaple

Bedeford

Hartlandt point

Stratton

Bedeshaven

Devonia.

Padstou

Dorc

Start point

Salmouth

Cornwal.

Sorlinges

S. Ives bay

Mounts bay

S. Michel

Wolf

Plimouth

Tamer

Dartmouth

Sal. m

Bayart

I. Kreenbroot

Heyßant

Kenmeneß

Crodon

Boldawets bay

Scims

Bre taig

VRANC-

Het Canael tusschen Engelandt en Vrancrijck

Met Privilegie der E.d. H.M. Heeren Staten generael voor thien jaren

Kent.

Southam pton.

Suss ex.

orchester.

Wicht.

Hampton

Portsmouth

Arundel

Brambe

Hastings

Dungeness

Calesy

Dover

Deale

Margat

Sandwich

Winter

Stoner

Rye

Hythe

Calais

Gravel

Ca

Sangatte

Blanc Nez

Wisant

Escalles

Sinckfal

Scenhoost

Hable de grace

Fescamp

Roan

Tancarville

Caux.

Markel

Caremé

Basseville

Falaise

Dieppe

Arck

Sark

Jarzey

Ehervé

Buskin

Mankiers

Morte faim

Granville

Sausse

Cancalle

S. Malo

Dinant

Anvence

Norm andie.

Dutsche mijle 15 in een graedt

Spaensche mijle 17½ in een graedt

Eng. en Fr mijle 20 in een graedt

63

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een gra.

Eng. en Fr. mylē 20 in een graedt

Heu

Treport

Criel

S. Valery

Cayeu

Crotoy

Somme flu.

Oostduyn

Authy flu.

S. Josse

Monstreul

Canche flu.

Estaples

Bo[illegible]

Boloigne

Beumen

Tour d'ordre

Den Oudēman

Ambleteul

Sainrtenes

De Cuſten van Picardie en Normandie, van Swartenes tot de Seine

Kilgebuf

Berfleet

De Seine

Hoogfleur

Hoek van Tockot

Hable neuf

Hable de grace

Warange

S. Valery en caux

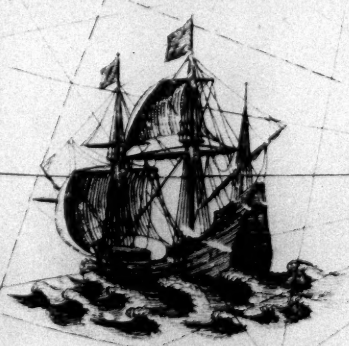
Seynhoeft

Fecam

Strunſaert

C. de Caux

Rettiers



THE SECOND BOOKE of the VVESTERNE NAVIGATION,

Containing the Deſcription of the Coaſtes of France from Callice to Vſhant, and of England from Dover about the Lands end of England unto the poynt of S. Davids in Wales.

CHAP. I.

The coaſts of Picardye, and Caux, from Callice to the River of Roan.

Blackneſſe. ABOUT a great league to the vveſtwards of Callice cliffe, lyeth Blackneſſe, a fowle out-poynt, thwart of it lye many rocks alongſt the ſhore. From Blackneſſe to the River of Bullen, lyeth the coaſte ſouth & by eaſt three leagues; a league to the ſouthwards of the Neſſe, the land falleth ſomewhat in with a faire ſandy Baye. In this Baye lyeth a Fiſher village on the coaſt, thwart of it in the ſandy Baye is a very good roade for eaſterly windes, in 5, 6, 10, 15 and 16 fathom, according as you will lye farre from the ſhore. For to ankor there, you muſt bring the ſteeple of the village over the middeſt of the houſes. This place is called S. Iohns road. A litle to the northwards of that foreſaid Fiſher village, ſtands a mil with ſome houſes, from thence to the northwards you may not anckor, for there the ground is fowle and ſtony. To the ſouthwards of the Roade towards the River of Bullen, lye alſo ſome litle rockes alongſt the coaſt, which you muſt not come very neere to.

S. Iohns Roade.

Vpon the north poynt of the River of Bullen ſtandeth a high thick Tower called *la Tour d'Ordre*, by ſea-men the Old-man, a ſpeciall mark for to know the River by. About an Engliſh mile to the northwards of this Tower, a litle mile from the ſhore, lyeth a litle ſuncken rock under water, where a Huye or ſmack may not go over.

Tour d'Ordre, Old man.

Suncken rock.

Vpon the ſouth poynt of the river of Bullen ſtandeth a ſtone wall, and vpon it a great Beacon of a maſt, thwart of it from the ſouth point lyeth off a litle riffe or ſhowld, that you muſt ſhun, and run cloſe aboard alongſt by the Head, which lyeth at the north poynt, and hath been there lately made. When you are come within this Head; you muſt preſently let fall your ankor and ride there; It is a tyde haven, where men muſt goe in at high vvater, and at low water lye drye upon the chindle. Without, before the River, lyeth a banck, men were wont from the ſouthwards to run in over it in two fathom, and from the northwards in three fathom, but it is now to the ſouthwards deeper through the ſcouring of the vvater alongſt the foreſayd Head, which is made at the north poynt.

Bullen.

The Sõme

From the Oldman, or the River of Bullen to Somme is the courſe ſouth about eleven leagues, between them lye alſo two other rivers, Cauche & Autij, upon the firſt lye Eaſtaples and Monſtreu, there you muſt goe in amid channel at the higheſt vvater; vvithin, it falleth altogether dry at low water.

For to ſaile into the Somme.

Men may ſaile into the Somme, through two chanels, from the eaſt poynt called the Eaſt Downe, lyeth off a ſand thwart before the chanell; to the vveſtwards of that riffe lyeth alſo an other great banck, between them goeth in the Eaſter channell. For to ſaile in there, bring S. Valery a cables length to the weſtwards of the vveſt poynt of the river, called the Oordell, and run in thereupon, untill you come to the land at that foreſayd weſt poynt; and from thence cloſe alongſt by it, or as ſoon as you get againe deeper vvater over the banck, then up eaſtward towards the Beacons. From the point of the Oordel lyeth off to the northwards a litle riffe, upõ the end of it lyeth a buye which you muſt leaue on the ſtarbord ſide, & run in cloſe about to the northward of it. Frõ the poynt of the Oordell upwards, it is ſet all alongſt with beacõs, you muſt run alongſt cloſe by them, until you come within the point of S. Valery, where you muſt anckor, & lye every tyde dry. The ſands therewithin do ſhift ſo often, that they are not to be deſcribed for alwaies.

For to ſaile into the vveſterne channell.

For to ſaile into the vveſter channell, coming from the eaſt or the north, you muſt run alongſt by the bankes in ſixe or ſeven fathom, and not neerer, they are ſo ſteepe, that a ſhipp ſitting faſt againſt them with the the fore-ſhip, at the ſtern hath three fathom. Coming towards the land at

the end of the bankes, you ſhall finde a buye. Or els if you come from the weſt, & bring Crotoye a cables length within the Oordell, and ſaile ſo right in, you ſhall finde the foreſayd outermoſt buye. Beſides this, there lye three other buyes, vvhereof that foreſayd buye on the poynt of the Oordell is the fourth, and the innermoſt: you muſt leaue them all on the ſtarbord ſide towards the land, & run in alongſt by them to the northwards of them.

Theſe channels and ſands therewithin (all untill paſt S. Valerye) fall at low water altogether drye, the buyes alſo fall drye, that men may goe by them; at halfe flood with an ordinary tyde, there is no more then two fathom vvater, it is not good to goe in there before that two third parts of the flood bee ſpent. With an ordinary tyde it floweth there fiue and ſixe fathom, but with a ſpring tyde ſeven fathom up and downe. At high water and ſpring tyde, a man may goe over all the bankes and ſands with eight or ten foot water: fiue leagues upwards lyeth Abbeville.

Thwart of the Somme, it is farre off into the ſea ſhowld water, fiue, ſixe, ſeven, eight, nine and ten fathom, three or foure leagues off into ſea: he that cometh from the weſt, and findeth himſelfe in darke and miſty weather to bee in ſuch ſhowlding, may be well aſſured, not to be farre from the Somme. From the Oldman to Diepe the courſe is ſouthſouthweſt ſixteen leagues, but from the Somme to Diepe ſouthweſt and by weſt eight or nine leagues. About halfe wayes between the Somme and Diepe, lyeth the river of Heu, within it on the north ſide lyeth Treſport, being alſo a tyde haven, where men muſt goe in at high water, and at lowe water lye drye.

Treſport.

Diep. At the eaſt ſide of the haven of Diep, lyeth a rane of rockes, and from it lyeth a litle riffe of chindle towards the north, or the weſt; to the ſouthwards of this riffe, goeth in the channell, about ſoutheaſt in, it is very narrow, and a ſhort in-let, therein lye three buyes in the middeſt of the deepe, not aboue a ſtones caſt one from the other, men may run in on both ſides of them; coming to the end of the buyes, they muſt keepe the middle of the chanell, and run in between the heads, untill they come within the town, and there make faſt with a cable on the ſhore. Men may not ſaile in there before halfe flood, but not at halfe ebbe; at low water it falleth altogether drye, but within at the town men may ride afloate, at high water there commeth three fathom, or at the higheſt not more then three fathom and a halfe water, there come out alwayes Pilots to bring ſhips in.

S. Valery in Caux. From Diep to S. Valerye in Caux, it is weſtſouthweſt foure leagues, that is alſo a tyde haven, where you muſt goe in with high water, it is a narrow channell, where you goe in between two Heads, there is neither ſand nor banke before it that can hurt you: being come in, you may let your ankor fall, and make you faſt with a cable on the ſhore. He that hath neither cable nor ankor, may (being come there within) ſaile his ſhip on againſt the ſhore in the chindle, and ſo ſaue his ſhippe and goods without dammage.

Fecam. From S. Valerye to Fecam it is w. ſ. w. foure leagues, that is a deepe tyde haven, there ſtayeth at low water litle leſſe then two fathom water. At the eaſt ſide of the havens mouth lyeth a bank or plate, men may with ſmall ſhippes ſaile in through betwixt it and the land, and ſo runne in, ſounding, borrowing in eight or nine foote alongſt by the eaſt ſhore, which is flat. For to ſaile in to the weſtwards of the plate, you muſt keepe the tower of Fecam without the land, or without the weſt poynt of the haven, and then it ſhal be ſouthſoutheaſt from you, run then upon that mark into the haven, and then the foreſay d ſand ſhall remaine on the larbord ſide of you, and at halfe flood you ſhall haue in the havens mouth two fathom water, being come in before the towne, you may ankor there by the weſter ſhore in three fathom.

Struyſaert. From Fecam to Struyſaert it is weſtſouthweſt three litle leagues. Without the poynt of Struyſaert lye two high ſharpe rockes. From thence to Seynhead it is ſouth and ſouth and by weſt two leagues and a halfe.

About northweſt from Seynhead lyeth a bank, upon which at low water remaineth no more then two fathom and a halfe water: when the towne of New-haven commeth without Seynhead, then are you thwart of the bank: for to avoyd it, run in cloſe abord the Seynhead, alongſt nntill you come within the firſt mill, there let fall your ankor in ſixe fathom, and ſtay for a Pilot to bring you into the haven.

For to ſaile into the river of Roan. For to ſaile into the river of Roan, comming from the north or the eaſt, you muſt runne cloſe aboard the land to the northwards of Seynhead, and alongſt by it ſo long, untill the ſouth ſide of the river come unto the poynt of Seynhead, then runne in with it, untill the land to the eaſtwards of New-haven come without New-haven, ſaile then unto the haven of New-haven. Or els, if you will goe without, about the banke or the Rettires, then edge over to the weſtwards ſo far from the land, untill the river come open, ſaile then towards the poynt of Tochet, and run in upon your lead by it, there is at high water three fathom, and at low water no more then one fathom. The Rettires is a ſtony banck lying in the middeſt of the river of Seine, lying over towards the poynt of Honfleur, at low water it falleth at ſome places drye, at halfe flood it is to the ſouthwards three fathom, but to the northwards two fathom deepe. When the land

of

of Caen is without the poynt of Seinhead, and you ſaile then with it, ſouth on, then you runne to the vveſtwards of it, or alongſt without it. Or els if you keepe Struyſaert a handſpikes length without the land of Seynhead, then you runne alſo without it. When the Eaſter gate of New-haven commeth over the Eaſter head, and the Eaſter mill, and ſaile then ſo on, keeping them ſo, then you runne in right to the northwards of the Rettires, and alſo you can take no hurt of the bank that lyeth towards Seynhead. At Habell or New-haven men muſt goe in at a high water, and vvithin, lye every tyde drye.

The river of Seyne muſt be ſailed into upon the tyde, when the moſt, or the ſtrongeſt of the flood is ſpent, then you may ſaile alongſt by the land upon your lead, untill you may ſee in open into the river of New-haven, when then the Souther caſtle cometh over the Eaſterhead, and the mill; runne then right in upon it, but it is beſt to ankor halfe wayes betwixt the Caſtle & Seynhead, and there to ſtay for a Pilot: If there come none off, then ſaile from thence right with the caſtle that ſtandeth upon the head, there it is deepeſt water.

To ſaile from New-haven upwards, towards Roan, is not well to bee done without a Pilot, you muſt goe with the tyde through the firſt travaille or banckes, which lye from New-haven to Honfleur ſoutheaſt alongſt by the Southerland, and from thence alongſt the north ſide of the river to Quillebeuf, being come there, you are through the firſt travaillie. You muſt alſo be well adviſed, and take good heed for the ſtrong Spring by the Normans called *La Barre*, which every tyde cometh on ſo ſtrong with the flood, that ankors and cables haue enough to doe, to hold a ſhippe: for that and other dangers more, it is not good nor convenient to ſaile up the river without a Pilot.

Of the tydes, and courſe of the ſtreames.

BEfore Callice and Blackneſſe the flood falleth firſt one quarter to the land, afterwards northnortheaſt.

Betwixt Blackneſſe and Bulleyn the flood falleth north and by eaſt by the land, but a ſeaboord in the offing northnortheaſt. A ſouthſoutheaſt Moone maketh there the higheſt water.

Betwixt Bulleyn, Diep, & before the Somme, the flood falleth firſt one quarter to the land; afterwards northeaſt and by eaſt, and the ebbe ſouthweſt and by weſt.

Betwixt Diep and Struyſaert without the land in the fareway, the flood falleth northeaſt and by eaſt and the ebb ſouthweſt and by weſt.

At New-haven, and in the river of Roan a ſoutheaſt Moone maketh a high water.

From Struyſaert to Caen in the Foſſe, the flood falleth ſouthſouthweſt, and the ebb northnortheaſt.

Of the markes and depths thwart of theſe lands.

TO the ſouthwards of the Oldman, or Tour d'Ordre, lyeth the high land of Eaſtaples, vvhich is very good to be known, becauſe thereabouts is no land ſo high. When that is northnortheaſt from you, and you be thwart of the Somme, it is there deepe 8 and 9 fathom.

Vpon the land of Somme towards Diep, ſtand many ſharp towers, and ſome milles & trees, and hath all alongſt a coaſt a ſandy ſtrand.

Before Diep men may ſee the land in twenty and two and twenty fathom.

About foure leagues without Struyſaert it is deep 20 fathom.

Between Diep and Seynhead ſtand alſo many ſharpe towers, trees and houſes upon the land. Struyſaert is beſt to be knowne, by a high rocke that lyeth by it, like to a high tower, thwart of it in the fareway it is deepe 16 and 17 fathom.

Courſes and Diſtances.

FRom Callice cliffe to Blackneſſe ſouthweſt one great league.

From Blackneſſe to the Oldman, ſouth 2 leagues
From Blackneſſe to Somme ſouth 9 leagues.
From the Somme to Treſport ſ.ſ.w. 7 leagues.
From Treſport to Diep ſouthweſt 7 leagues.
From Diep to Fecam, w.ſ.w. 11 leagues.
From Fecam to Struyſaert ſouthweſt and by weſt — — 3 leagues.
From Struyſaert to Seynhead the courſe is ſouthſouthweſt two great leagues.
From Seynhead to Caen in the Foſſe the courſe is ſouthſouthweſt ſixe or 7 leagues.
From Blackneſſe to Diep ſouthſouthweſt and ſouthweſt and by ſouth 17 leagues.
From Blackneſſe to Struyſaert, or C. de Caux, ſouthweſt and by ſouth ſomewhat weſterly — — 29 leagues.
From Blackneſſe to the Caskets the courſe is vveſtſouthweſt 48 leagues.
From Blackneſſe to Wight vveſt ſomewhat ſoutherly — — 37 leagues.
From Blackneſſe to Beachy vveſt 20 leagues.
From Diep to Wight the courſe is vveſtnorthweſt 37 leagues.
From Diep to Beachy northweſt 21 leagues.
From Diep to Dover north, twenty three or — — 24 leagues.
From Seynhead to Diervliet, or the poynt of Sherburgh, vveſt ſomewhat northerly, — — 20 leagues.

From Seynhead to Portland northweſt and by weſt ___ 38 leagues.
From Struyſaert to the eaſt end of Wicht, northweſt northerly. 29 leagues.
From Struyſaert to Beachey, north, 23, or 24 leagues.
From Struyſaert to Fairlye, north and by eaſt, 27 leagues.

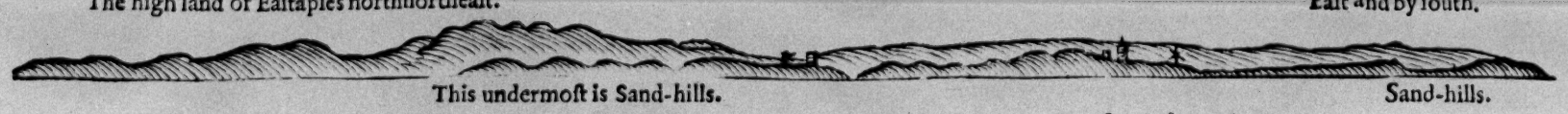
From Struyſaert to the poynt of Dover, the courſe is northnortheaſt. 33 leagues.

Heights.

THe Somme lyeth in 52 degrees 18 minuts.
The poynt of Struyſaert in 45 degr. 45 min.

Hovv theſe lands doe ſhevv themſelues at ſea.

From Callice Cliffe unto beyond Bulleyn the land ſheweth it ſelfe thus, when you ſaile alongſt by it.



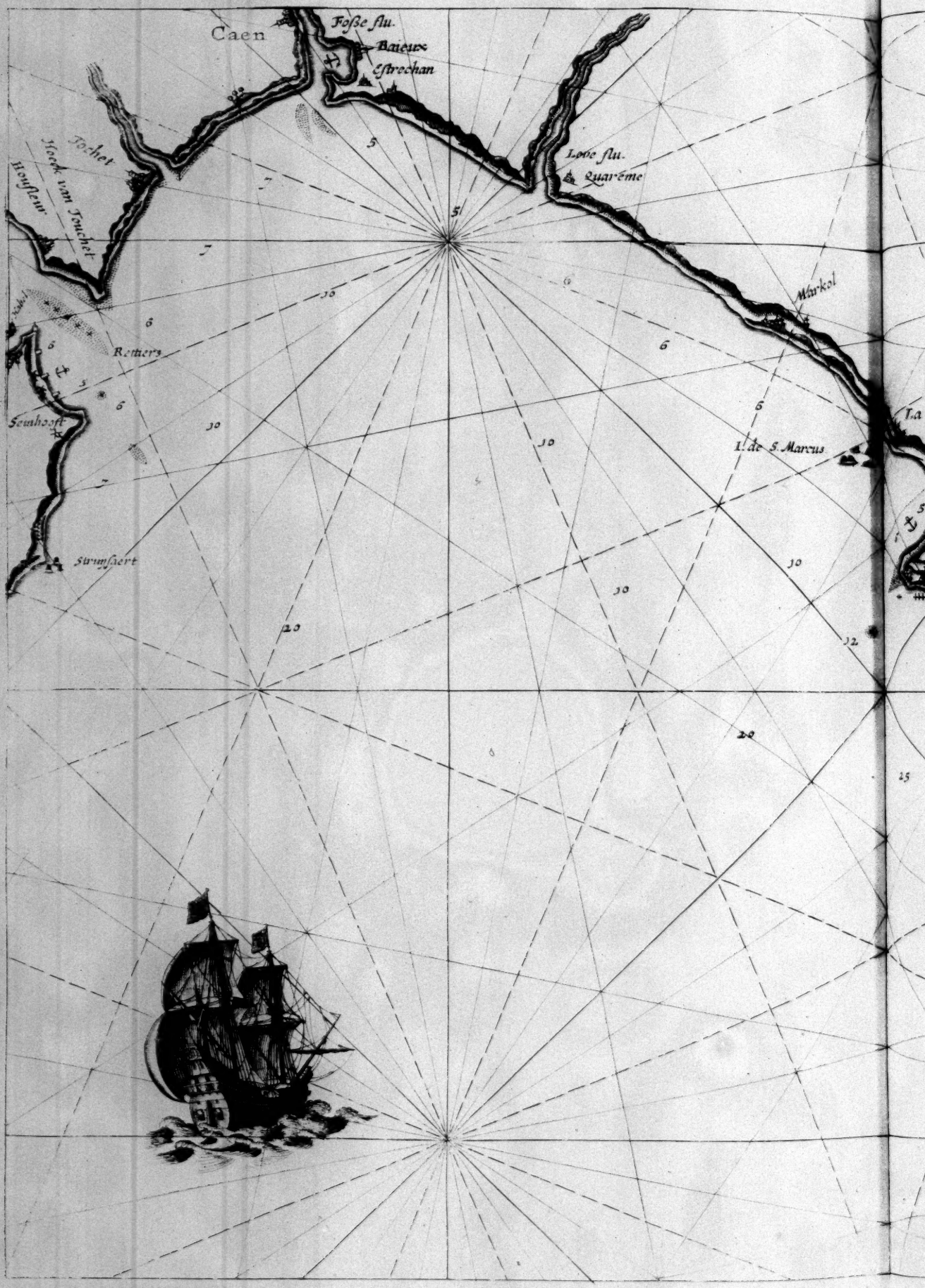
Thus ſheweth the land betwixt Eaſtaples and the Somme, when the high land is northnortheaſt from you.

Thus ſheweth the land to the ſouthwards of the Somme, towards Diep.

Theſe two figures belong at the A A one to the other.

The land between Diep and Fecam ſheweth like theſe two figures here aboue, when you ſayl alongſt by it, two or three leagues without the land

The forme of Struyſaert, and Seynhead, when you ſayle alongſt by them.


Caen
Foße flu.
Baieux
Estrechan
Loüe flu.
Quarême
Markol
Fochet
Hoeck van Fouchet
Houssaur
Rettiers
Seuhoost
Sturmsaert
I. de S. Marcus
T.a
5
6
7
10
20
25
30

Duytsche mylen 15 in een graedt

Spaensche mylen 17 ½ in een graedt

Eng: en Fr: mylen 20 in een graedt

De Cust van Normandie tusschen Seynhoost en de Kiscaßen

C. de Vorha

La Honge

C. de Barfleur

C. de Wyck

Chierbourgh

Fosse de Moberille

C. de la Hague

't Ras van Blanckart

Ornay

Ornay

Barroches

Casquettes

Kiscaßen

65

Tocher.

life of
Cun.

Co of Sher
hrough.

Marcus.
Lhonyc

Swicken-
ick.

CHAP. II.

The Coast of Normandy from the Seyne unto C. de Hague, and the Caskets.

TWOE great leagues to the southwards of the river of Roan, lyeth a Tyde-haven called Tochet, on the west side of the entry standeth a beacon, by it you must go in, or you may sound it in by the Easter shore. Southwest, or southwest and by south from the poynt of Seynhead, , about sixe or seven leagues off, lye many bankes, a good wayes in sea, you may saile on both sides of them (as well to the eastwards as to the westwards) into the Fosse of Caen, which lyeth in most south, and lyeth in a Baye. At the west side lyeth a chindle, where men may ride within it, it is wyde and broade, and all sandy strand, the Eastland is sand-hills, and farre flat in sixe and seven fathom, there men may goe in, sounding with the sounding pole.

Tochet.

Fosse of Caen.

From Seynhead to Cape de Barfleur, or Cape de Shierborough, the course is vvest nineteene leagues. About foure leagues to the eastwards of it, lye the Ilands of S. Marques, men may sayle round about them, but it is not there very cleane.

C. of Sherborough.

A league to the vvestwards of the Ilands of S. Marcus lyeth *la Honge* a flat Tower, to the vvestwards of it lyeth the poynt of Barfleur, betwixt both is a great Baye vvhere men may lye in sixe or seven fathom land-lockt, for a n.n.w.vvinde. A northeast winde bloweth there open in.

S. Marcus. La Honge.

From the north poynt or C. de Barfleur (vvhich lyeth northnorthwest from you, vvhen you lye in the road) lyeth off a banck or litle riffe, yet a shippe may goe over it. Northeast a league and a halfe off from the foresayd poynt, lyeth a rock under vvater, where shippes may not goe over.

Smockenack.

From C. de Barfleur to Shirborough it is vvest and vvestnorthwest foure leagues, that is a little Tyde-haven. To the vvestwards of the poynt of Barfleur, lie some fowle grounds, if you keepe the high land of Sherborough without the Cape de Wyck, you shal not come too neare them.

Before Cape de Wyck is a good roade in sixe fathom, a litle to the eastwards of the two high rockes in a sand-bay.

Cape de Wyck.

Before Sherborough lye some rockes, or litle Ilands, vvhich are cleane round about, to the vvestwards of it lyeth a Tydehaven, called the Fosse of Moberille, before it on both sideslye 4 or 5 high rocks, at high vvater men runne through betwixt them, and so into the haven. A great league and a halfe to the vvestwards of it, lyeth C. de Hague.

Cape de Haghe.

Twoe leagues west and by north from Cape de Hague, lyeth the Iland Aldernay or Ornay, betwixt them goeth the Race of Blanckert through. Aldernay or Ornay is about three leagues long, and lyeth east and vvest. The east end is cleane, men may saile reasonable close alongst by it, but the west end is very fowle: there lye some little Ilands close by the west end, being passed them, men may saile towardes Iarsey without any feare.

Ornay.

The Race of Blanckert.

To the southwardes of the foresayd little Ilands at the vvest end lyeth off a ledge of rockes, vvithin it, on the south side, it is cleane, except at the south poynt, that is also fowle. He that will anckor on the south side of Ornay, must be mindfull thereof, and ankor a little to the eastwards of the Tyde-haven.

From the west end of Ornay lyeth a great multitude of rockes west and by north, and westnorthwest off three leagues into the sea.

Vpon the outermost and westermost end, lyeth a great high rock with many other smaller rockes about it. Halfe wayes betwixt this great rocke and Ornay lyeth another great rock, but not so high as the foresayd westermost, from it lye off a multitude of rockes towards the outermost, which fall dry at low water, but at high water many lye under water. These two great rockes are called by the French *Les Casquettes*, and by the Dutch the Kiskassen, and by the English the Caskets. Close by the west end of Ornay, towards the Caskets, lye other two great ranes of rockes, called the Barroches.

Caskets.

Barroches.

Of the flowing and setting of the tydes.

BEfore the haven of Caen a southsoutheast Moone maketh high water; within the haven a south and by east Moone.

At Marckell, la Honge, Barfleur, Sherborough, and C. de Hage by the shore, a south and by east moone.

From Seynhead to Barfleur the flood falleth by the land east and by north, and the ebbe west and by south. But in the channell a seaboorde the land, the flood falleth awaye eastnortheast, and the ebbe vvestsouthwest.

Of

Of the Depths, and markes for to know the land by.

ABout C. de Barfleur and Sherbrough foure leagues from the land, it is deepe thirty fathom.

Barfleur is a high poynt, below upon the white land ſtandeth a flat tower, two milles, and ſome litle houſes, and to the weſtwards of it is more white land.

Vpon Cape de Hague ſtandeth a Caſtle, with a little turret; a little to the eaſtwards of it in the land ſtandeth a ſharp tower. Two leagues to the eaſtwards of it lyeth Sherborough vvith a flat ſteeple.

The Iland Ornay is upon the vveſt end high with a ſteep going down poynt: the eaſt end is hilly, or with homocks, but lower then the vveſt end, in ſayling by it, men may ſee upon it a tower or two vvith ſome milles. Vpon the north ſide of the Iland lyeth a vvhite hill like a ſand-hill.

To the northwards of the Caskets, two leagues from land it is deep 35 and 40 fathom.

Courſes and Diſtances.

FRom Caen to Dierfliet, or the poynt of Barfleur northweſt 16 leagues.
From Dierfliet to Cape de Hague vveſt and by north 8 leagues.
From C. de Hague to the outermoſt of the Caſkets vveſt and by north, 8 leagues.
From the Caskets to Beachy northeaſt and by eaſt 37 leagues.
From the Caskets to Wight northeaſt and by north. 20 leagues.
From the Caskets to Portland north and by weſt 13 leagues.
From the Caskets to the Steart vveſtnorthweſt 19 leagues.
From the Caskets to Silly vveſt ſomewhat northerly 56 leagues.

Thus ſheweth the land of Sherborough, and the land to the weſtwards of it towards C. de Hague when it is ſoutheaſt foure leagues off from you.

Thus ſheweth Ornay with the Caskets, when it is ſouthſoutheaſt from you three or foure leagues.

Thus ſheweth Ornay and the Caskets, when you ſaile alongſt by them, and Ornay is ſoutheaſt from you three or foure leagues.

How theſe lands doe ſhew themſelues at ſea.

Thus ſheweth the land of Cane when you are foure leagues off from it.

Thus ſheweth Ornay when you ſhall ſaile alongſt by it foure leagues from the land.

The

Aurentie
Pont Orsum
Dinant
Dinant flu
Mont St. Michel
Cancale
Conplence
S. Malo
S. Seledor
C. de Fareld of C. de Jare
S. Brieux
Lafiueue
Oester Gat
Mezeusteen
Sycamber
Iuyster gat
Granville
De Sausee
Oesterbanck
Gaure
Mortefum
Buskin
Monke
Eckeruu
Buff
S. Caterina
S. Hilarius
Iarzee
Trinitz
C. de Varha
Piere leack
Putter nosters
Sarck
Arck
Arem
Blanckerit oste Ornay
Garnzee
C. de Gruse
Garnzey
Ornay
Barroches
Casquettes oste Kiscaßen

1 2 3 4 5 6 7 8 9 10
Duytſche mijlen 15 in een Graadt
1 2 3 4 5 6 7 8 9 10 11 12
Spaanſche mijlen 17¼ in een Graadt
1 2 3 4 5 6 7 8 9 10 11 12 13
Eng. en Franſ. mijlen 20. in een Graadt

Paſcaarte vande Zeecuſten van Normandie en Bretaigne tuſſchen de C. de Hagu en Roſcou

Portrieux
Ponurien
Lauvrkierk flu.
Poyt blanc
Freguer
Vlis haven
Laminoe flu.
S. Lan. de Doy
Morlions
Pickels
t Groen Eylant
Morlaix
Seven Eylanden
Drinkel Potten
Oofter gat
Oofter gat van Roſcou
S. Paul de lion
Plaimpaul
Roſcou
Yſle bas
Le Taureau
Oofter gat vit Roſcou

66

Roade u
der Garr
ley.

Jacke-
ares.

Jack.

CHAP. III.

The Coaſtes of Normandy and Brittaine betvvixt Cape de Hague and Roſckovv, and of the Ilands thereabouts.

FROM the eaſt poynt of Ornay to the eaſt end of Garneſay (about to the ſouthwards of Ornay) the courſe is weſtſouthweſt, ſeven leagues; but from the Caskets to the weſt end of Garnſey ſouthweſt and by ſouth ſeven leagues.

Roade under Garnſey. If you will anckor under Garnſey (coming from the Caskets) then runne on to the northeaſt poynt of Garnſey, & ſo far to the eaſtwards of it, until you get ſight of the caſtle that ſtandeth upon the rock on the eaſt ſide of Garnſey. Or if you come about to the vveſtwards of the Caskets, then goe on ſoutheaſt, or ſomewhat more ſoutherly, untill the northeaſt poynt of Garnſey be ſouth and by weſt from you, ſaile then towards it, you ſhall come in ſight of that foreſayd caſtle upon the rocke. Bring that over the ſouth poynt of Garnſey, and ſaile in upon that marke, betwixt the Iland Arem, or Harm, and Garnſey, untill you come by the foreſayd caſtle; betwixt theſe Ilands it is on both ſides full of rockes, whereof you muſt take good heed, eſpecially on the larbord ſide towards Arem, when you are come by the caſtle, you may ankor within or vvithout it, vvhere you pleaſe, without the caſtle in twelue or thirteen fathom; or within the caſtle, (that is betwixt the caſtle and Garnſey) in ſixe or ſeven fathom at low water, it doth flow there ſixe or ſeven fathom, up and downe, vvhich men muſt reckon upon.

Vnder the ſouth ſide of Garneſey men may ride for northweſt, north, and northeaſt windes. If you come from the weſt, or from the Caskets, you muſt runne cloſe about by the ſouthweſt poynt, called C. de Gruſe, and alongſt by the ſouth ſide of the Iland, well halfe wayes the Iland, and anckor there where you think good, in eighteen or nineteen fathom. If the vvind ſhift to the ſouthweſt, or to the vveſtſouthweſt, then you may runne about by the ſouth poynt unto the foreſayd caſtle, and anckor there either without or within it, as here before is ſayd. From the aforeſayd ſouth poynt, lyeth off a litle ledge of rockes, vvhereof ſome rocks lye aboue, and ſome under water, that you muſt avoyd when you ſail about by it.

South and by weſt, and ſouthſouthweſt about eight leagues from Garnſey lyeth a great ledge of rockes, more then a league great, called Rockeduves. Rockeduves.

About two leagues eaſt from Garnſey lyeth the Iland Sarck, there men may anckor round about it in fiue and twenty, ſixe and twenty, and ſeven and twenty fathom. From the north end lye off ſome rockes, whereof ſome lye aboue, and ſome under vvater. At the ſouth end lye alſo ſome rockes, but all aboue water. Sarck.

Betwixt Garnſey and Sark lye twoe other litle Ilands, Arck and Arem, or Harm, there men may ſaile through betwixt them. Arck and Arem.

The Iland Iarſey lyeth from Garnſey ſoutheaſt diſtant ſeven leagues, round about this Iland are good roades at divers places. All alongſt the north ſide men may anckor in ten and eleven fathom. At the ſame north ſide, ſomewhat within the vveſt poynt, lye ſome great rockes, a good wayes off from the ſhore, called the *Pater noſters*, or Pierrelegh. Pater noſters.

At the ſouthweſt poynt lye many rockes which lye off a great wayes into the ſea, to the northwards of them, to wit, betwixt them and the vveſtrmoſt poynt, at the vveſt ſide of Iarſey men may ankor at divers places in ten, eleven and twelue fathom. At the ſouth ſide of Iarſey is alſo a good road for a northweſt & weſtnorthweſt vvindes. At the eaſt ſide lyeth S. Catherines baye, there is alſo a very good roade for vveſterly vvindes. S. Catherines Bay.

The vveſt end of Iarſey and S. Malloes, or the Iland Siſember before S. Malloes, lye ſouthſoutheaſt, and northnorthweſt, eight or nine leagues aſunder. About halfe wayes betwixt both right in the fareway, lye a great number of high rockes together, which containe in circuit in ſailing about, ſeven or eight leagues, called the Mankiers, they lye farre towards Iarſey, ſome aboue and many under water, ſo that it is not without great danger to runne through betwixt Iarſey and the Mankiers. Mankiers Rockes.

When men vvill ſaile through the Race of Blanckert bound for S. Malloes, they run commonly through betwixt Sarck and Iarſey: men may alſo ſaile to the eaſtwards of all the Ilands & ſhowlds alongſt the coaſt of Normandy, toward S. Malloes, in manner as followeth.

When men come a litle paſt the C. Voorha, they ſhall meet (thwart of the Iland Iarſey) vvith three or foure high rockes, called *Le Beuf*, men may runne to the vveſtwards of them, and ſo through betwixt them and the Iland Iarſey, or els to the eaſtwards of them alongſt by the main land, even as they wil, towards the riffe of Mortefaim, that lyeth upon the coaſt of Normandy ſouthſoutheaſt eight leagues from Cape de Voorha. Le Beuf.

Over againſt, or thwart of the Riffe of Mortefaim, lyeth a rane of rockes lying eaſt and vveſt more then a league in length called Bufkin, at the eaſt end many of them lye aboue, and at the weſt end moſt of them lye under water. Men muſt ſaile through betwixt them & the riffe of Mortefaim, that are bound for Granville. Beufkin.

Betwixt the foreſayd rockes Beuf and Bufkin,

Ekerou. lyeth another great rane of rockes called Eckerou, which lye off from the southeast poynt of Iarsey towards Granville; you must leaue all these rockes on the starbord side, and run alongst to the eastwards of them.

From the riffe of Mortefaim to Granville, the course is southsoutheast, and from Bufkin southeast foure leagues.

Granville. Cape de Voorha & Granville are two points that lye without the other land. About the south point of Granville lye two or three litle rockes; along by them men must run in within a Pier or head, where the ships lye dry at low water. Betwixt C. de Hague, and Granville, men may see upon the land many litle houses, mills, and trees, as they saile alongst by it. A litle to the southwards of the riffe of Mortefaim standes a church with two steeples called Quotanse, All alongst this whole coast is every where good anckering in sixe or seven fathom, especially a litle to the southwards of Cape de Hague.

About two leagues west from the point of Granville lyeth another great rane of rockes two great leagues long, lying east and west called *La*
La Shausee *Shausee*, betwixt them and the poynt of Granville men must saile through that are bound for Concalle or S. Malloes.

About fiue leagues to the southwards of Granville, in a great baye, lyeth an Iland before the river of Avrantie, about a league vvithout the land, called Mount de S. Michiel, upon it lieth
Mount de S. Michiel. a Castle, or litle towne called S. Michiel, vvith a high Tower vvhich men may see at sea. This Bay is to the southwards of Granville, vvithin the rocks of Concalle, very flat & rising ground, from thirteene, ten, eight, sixe, and foure fathom to one fathom, so that at low water the Bay falleth so farre drye, that from the strand men can see no sea nor water.

Concalle. From Granville to the point of Concalle the course is southwest fiue leagues, from that eastwards lye three rockes, under vvhich men may anckor in ten fathom. For to saile to the towne men must runne in betwixt the poynt and the foresayd rockes. It is betwixt them both eight and nine fathom deepe. Before the Towne it is showlder vvater. To the Northwards of the towne lye other two rockes, there men may also anckor under in fiue and sixe fathom water.

From the outermost rockes by the point of Concalle untill you come before S. Malloes, the course is west, and west & by south fiue leagues.

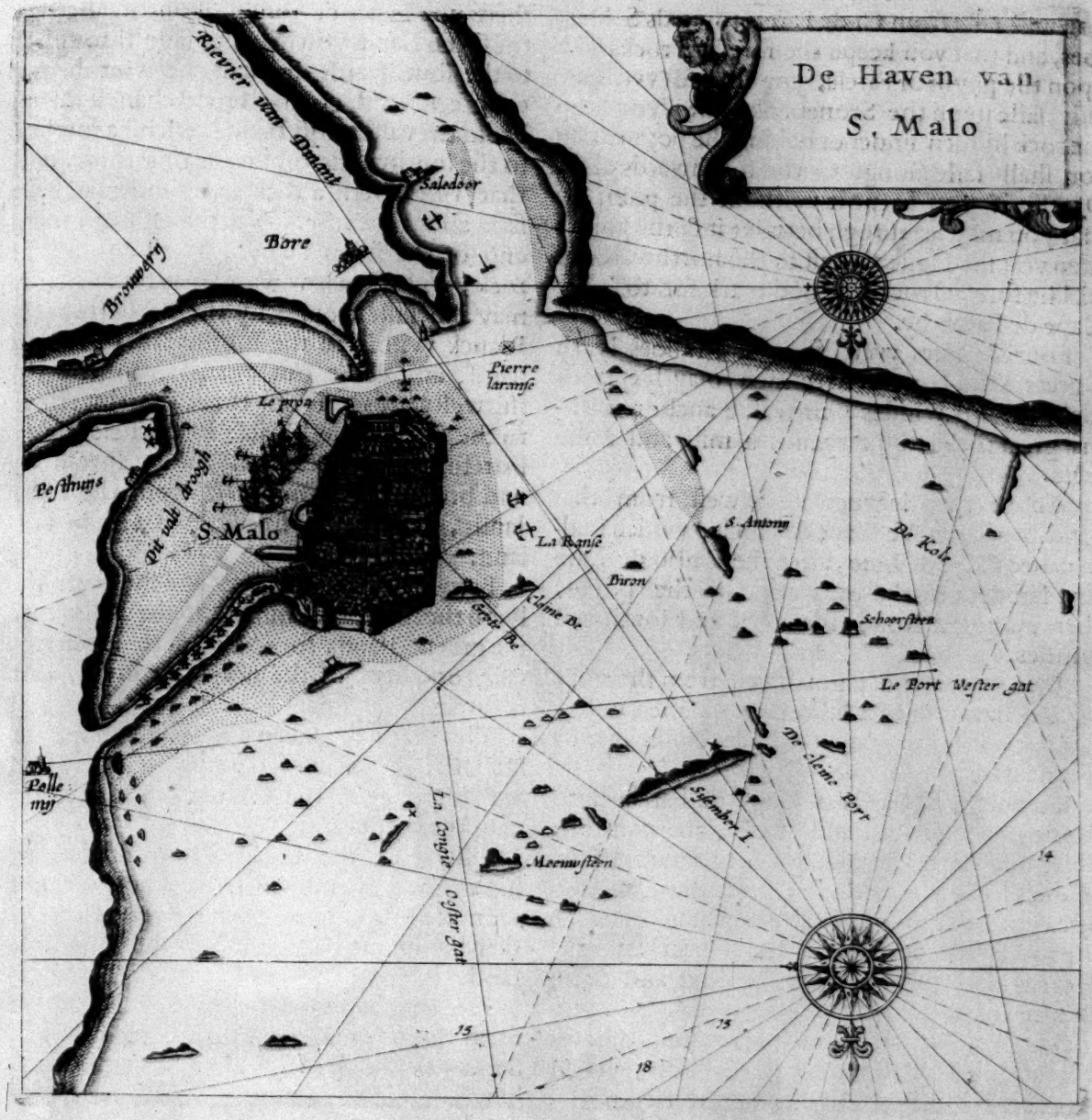
S. Malloes. Before the haven of S. Malloes, lyeth an I-
Sisember. land called Sisember, upon the west end thereof standeth a mill, and upon the east end a church vvith some litle houses being a Friery, comming out of the sea, you can but even scarce see the Church, but being vvithin the Iland, you may see it better, because it standeth on the south side of the Iland. A great shot of a cast peece to the eastwards of Sisember, lyeth a great high rock called the Meuwestone: betwixt that and Si-
Mewstone. sember it is all full of rockes and stones, vvhich at high vvater lye most under vvater: there is a litle channell betwixt them both, vvhich the French men use with their small shipping, through betwixt the rockes, but it is not to be used with great shipping, neither by them that are not very well acquainted with it.

Betwixt the Meuwestone, and some other rockes to the eastwards of it, lieth in a chanell south and south and by east in, called *la Congie*. La Congie. For to saile in there you must runne in close aboord to the eastwards of the Meuwestone, southeast and by east right in vvith the towne, untill you be gotten in two third parts of the distance (betweene the Meuwestone and the towne) from the Meuwestone, and are one third part of the distance from the towne, that is vvhen the Meuwestone is twice so farre from you as the town, then you shall see by the northwest point of the towne, two great rockes, about a shot of a cast peece from the foresaid point; upon each rock standeth a litle house, the outermost is the smallest, and is called the litle Bee, the nee- Little and great Bee
rest to the towne is the greatest, and is called the great Bee, saile then towards them, and run in about them vvithin a cables length of them, but keepe that course so long, untill that the litle tower (that standeth a litle to the southwards of the towne upon the point) come over the tower of Bore, a litle to the eastwards of Saledoor, keepe them one over the other, and saile so in, unto the south end of the town, vvhere the mils doe stand, then you shal see there upon the rocks two beacons, run betwixt them through at high vvater, untill you come vvithin the towne, at the east side, the shippes lye morred vvith foure cables, dry at low vvater, two fast on the towne, and two upon the sand. Betwixt these two foresaid beacons, to the southwards of the town, and thereabouts, is the ground sharpe, rockie, and stonie, therefore men must take heed not to stay there at low vvater, or to ground there, but within on the east side of the towne it is cleane sandie ground, there may the shippes lie a ground vvithout danger.

A litle within, or to the southwards of the foresaid rock the litle Bee, men may ankor in fiue or sixe fathom vvater at low vvater, so that the tower of Bore cometh a litle to the eastwards of the litle tower upon the point to the southwards of the town, that road is called by the French *La Ranse*, there men commonly first anckor, The Road La Ranse. and stay for high vvater, for to goe in about to the southwardes of the towne. It floweth here at S. Malloes, and thereabouts, seven fathom up and downe vvith an ordinarie tyde.

From

S. Malo.



From the weſt end of Siſember, lye off alſo a great many rocks alongſt to the vveſtwards, more then a great ſhot of a caſt peece, at the end of them goeth in the Weſter channell of S. Malloes, eaſt and by north in. For to ſaile in there, you muſt look out for a ſharp litle Tower, that lyeth ſomewhat to the northwards or to the eaſtwards of S. Malloes, vvithin the land called Pellemy; vvhen you have brought that eaſt and by north from you, then you ſhall ſee upon the ſhore right againſt it, a great black rocke, which for blackneſſe ſheweth it ſelfe without all the other rockes thereabouts, and thereby is very good to bee knowne: Bring that rocke and the foreſayd little tower one in the other, and ſayle ſo right in, untill you come thwart of the Iland Siſember, or els that the litle tower (upon the poynt to the ſouthwards of the towne) come to the tower of Bore, to the eaſtwards of Saledoor; ſaile then towards the roade of La Ranſe to the ſouthwards of the litle Bee, or els if it be high water, you may run in upon the markes, and then in about to the ſouthwards of the towne, as here before is ſayd.

When you ſaile into this weſter chanel, you ſhall leaue on the ſtarbord ſide a high rocke (called the Schoorſteen) with more other rockes to the vveſtwardes of it, vvhich at high water are moſt of them overflowne. On the north ſide, that is on the larbord ſide, lye alſo many rockes, whereof many of them are overflowne at high vvater, and alſo many remaine aboue vvater.

Yet a ſouther chanel lyeth in by the land to the ſouthwards of the rock of S. Antony, upon marks that men do ſee a ſtearne the ſhip, but it is not uſed but with ſmall ſhipping. More, a Souther channell.

About halfe vvayes betwixt the vveſter chanell of S. Malloes, and C. de Farela, lyeth a ſtony Stonebank

ſtony banck under water. A little to the vveſtwards of C. de Farela, lyeth a great rock. When you will ſaile from C. de Farela towards S. Malloes, and that you keepe the foreſayd rock right upon the poynt of Farela, you ſhall ſo (vvithout faile) ſaile upon the Stonebank: but if you keep the rock hidden under or behind the poynt, then you ſhall ſaile alongſt to the ſouthwards of it. Or elſe if you keepe it vvithout the point (ſo that you may ſee throgh betwixt it & the point) then you ſhall ſaile alongſt to the northwards of it. The foreſaid rock is a good mark for to know Cape de Farela by.

Foure leagues vveſt from S. Malloes lyeth a great Sand-bay, vvhere men may lye land-lockt for all windes: men doe anckor vvithin a great rock, right againſt a mill and ſome trees.

C. Farela. About two leagues northweſt from that Sand-bay lyeth the Cape de Farela, vvhich is alſo called Cape de Late, after the Caſtle de Late that ſtandeth to the eaſtwards of the poynt, there is a good Roade for vveſt and ſouthweſt windes.

Oyſter-bank. Two great leagues northweſt from the entry of the haven of S. Malloes, lyeth the Oyſter-banck, there under it men may anckor in ſixe or ſeven fathom.

I. Briack. To the Weſtwards of Cape de Farela unto the northend of the Iland Briack, the courſe is vveſt and by north nine or ten leagues. Two leagues from the land vveſt from the Cape, lyeth a great rane of rockes aboue water. Between the foreſayd Cape and the Iland Briack, lye the S. Brieux. Havens or Rivers of Saint Brieux, and Saint & S. Benit. Benit.

The Iland Briack is two leagues long, and lyeth ſouthſouthweſt and northnortheaſt, vvhen you come from the eaſt you ſhall ſee two milles upon it, and betwixt them a high round hill, with a litle houſe upon it: you may ſaile round about this Iland, and may make roades on every ſide where you will, although round about it here & there ly ſome rocks, yet it is all over good ankor ground. A good wayes off from the northeaſt point lyeth a rock called Souffe, and at the north end lyeth a ledge of rockes under vvater, whereof you muſt take heed.

A great league vveſtſouthweſt from Briack, three or foure leagues a ſea-boord the land, lye Pickels. the out rocks called the Pickels, men may ſaile round about them alſo, but to the eaſtwards of them towards the main land, lye many ſuncken rockes.

Port Blank Lantrilliers. Foure leagues to the vveſtwards of Briack lyeth Port Blank upon a great river called Lantrilliers, to the eaſtwards of this haven lye off many out rockes.

Sept. Iſles. To the weſtwards of Port Blanck, lye the Sept Iſles, or ſeven Ilands, lying from the Pickells diſtant fiue leagues eaſt and weſt. A league to the ſouthwards of them lieth the green Iland, there you may ride round about it. Betweene Greene Iland. the ſeven Ilands you may not ſaile through, but to the ſouthwards of them, betwixt them and the green Iland, goeth a broad chanell through. From the eaſtermoſt Iland lyeth off a fowle riffe to the ſouthwards, upon the outermoſt end of that riffe, lyeth a rock as a good marke for to ſaile about the riffe. Northweſt from the weſt end of the ſeven Ilands, lyeth alſo a ſunken rock, vvhich at low water may be ſeene. Men may alſo ſaile alongſt by the coaſt from Port Blanck vvithin to the ſouthwards of the green Iland, and come out againe into the ſea to the weſtwards: From thence northweſt off into the ſea, lye the Triacle Pots, theſe are great Triacle fearefull out-rockes, vvhich lye ſpread wyde Pots. and broade vveſtſouthweſt from the ſeven Ilands, and foure or fiue leagues a ſea-boord the land.

Betwixt the Triacle Pots and the ſeven Ilands lyeth the river of Laminoe, to the weſtwards of R. Laminoe. the greene Iland: for to ſaile in there, men muſt take good heed of the northeaſt poynt, vvhich is fowle.

Thwart of the ſeven Ilands, upon the maine land, ſtandeth a Church with a high ſteeple, called Our Lady of the Clearneſſe, thereby men may know them.

Thwart of the Triacle Pots ſtandeth alſo a high Tower, thereby men may know when they are neere them, but it muſt be very cleare weather before men can well diſcerne it uppon the land.

Hee that commeth by night or darke weather from the Fourne, or Vſhant, and is bound to Saint Malloes, let him not goe vvith a ſouther-ly winde, to the eaſtwards of eaſtnortheaſt, or northeaſt and by eaſt with a vveſterly winde, ſo long untill hee hath the length of the Triacle Pots, that they be on his broad ſide. The flood falleth ſoutheaſt within the Triacle Pots and the ſeven Ilands, and ſhould by night eaſily draw a ſhip towards them. By day, or when there is ſight, there is no ſuch danger.

Within the Triacle Pottes lyeth the tyde haven of Saint Iohn de Doy, two leagues to the weſtwards of the green Iland, and two leagues to the eaſtwards of Morlions, men may layle from thence through the rockes unto Morlions, and anckor in fiue and ſixe fathom at low water.

To the vveſtwards of the Triacle Pottes lyeth a great rock, the eaſter entry of Morlions, Morlions. lyeth from it ſouthweſt and by ſouth diſtant two leagues, but the weſter entry lyeth from it vveſtſouthweſt and vveſt and by ſouth foure or fiue leagues, that goeth in by a great long raggedrock. This entry men may ſaile in ſouth and ſouth

Morlaix. ſouth and by weſt, unto the caſtle of Morlaix; being about the caſtle they may runne through the rocks againe to the eaſtwards, and runne out againe at the eaſter entry northnortheaſt, and north and by eaſt into ſea, according as the tyde ſhal be, the flood cometh there out of the northweſt.

If a man would goe from Morlaix to Morlions, he may goe on eaſt through the rocks, and ſo ſaile to it: it is all broken land, and there remaineth at low vvater fiue fathom depth.

S. Paul de Lion. If you be bound to S. Paul de Lion, you muſt run right with the great rock, with the two horns or Sadle, and ſo cloſe alongſt by it: being paſt it, edge to the land, upon the ſtrand lyeth a village called Plempoll, ſaile right vvith it, and alongſt by it, to the eaſtwards of it goeth in the river. Theſe are all tyde havens, but betwixt the rockes of the Morlions, and the Iland Bas, it is at lowe vvater deepe enough for to ſaue a ſhip.

The land of S. Paul de Lion is double land, upon S. Pauls Church ſtand two ſharpe ſteeples. The Iland Iſle de Bas lyeth thwart before it, upon it ſtandeth two ſtakes, to ſee to a farre off like milles. Vpon the eaſt end of that Iland lyeth a very high ragged rock, vvhen you are to the eaſtwards of this rock, you ſhall ſee two ſharpe ſteeples a ſpace one from the other, theſe are the ſteeples of Plempoole: you may alſo then ſee the Caſtle of Morlaix lye ſoutheaſt from you, upon a high rock.

The foreſayd outermoſt long ragged rocke of Morlaix, lyeth from the top of the Iland Iſle de
Iſle de Bas Bas, eaſt and eaſt and by ſouth three or foure leagues. Men may ſaile alongſt by the maine land within & through theſe rocks, vntill they come to the ſeven Ilands, they are all great bayes where at moſt places is good ankor ground.

Roſckow. Within the Iſle de Bas lyeth the town of Roſkow, you may ſaile into the haven of Roſkow at both ſides of the Iland.

For to ſaile into the eaſter channell, when you are paſſed by the high rocke with the ſadle, or two hornes, called *Le Taureau*, and come by the land, betwixt the eaſt poynt of the Iland, and the poynt of the maine land over againſt it, you muſt ſaile in keeping the middle of the channell. It is in this channell ſeven and eight fathom deepe. Being come within the poynt of the Iland, you muſt runne in about by it, vveſt and by ſouth, and weſt on, untill you come about halfe wayes within the Iland, and ankor there in eight or nine fathom. And then Roſkow ſhall lye ſouth and ſouth and by eaſt from you.

If you will ſaile into the vveſter channell, you ſhall ſee to the weſtwardes of it, cloſe by the maine land, two great long rockes. From the poynt of the maine land, a litle to the eaſtwards of the eaſtermoſt long rocke, lyeth off a riffe from the land, which maketh the weſt ſide of the channell, you muſt runne in ſoutheaſt betwixt that riffe and the weſt poynt of the Iland, and when you come vvithin the poynt of the Iland, you muſt edge up northeaſt unto the middeſt of the Iland, and anckor there as here before is ſayd.

From Iſle de Bas alongſt to the Fourne or Vſhant lyeth the coaſt weſtſouthweſt 16 leagues. Reade thereof in the beginning of the fourth book.

Of the tydes, and courſe of the ſtreames.

AT Cape de Hague by the ſhore, a ſouth and by eaſt moone maketh high water.

In the Race of Blankert a north and by eaſt, and ſouth and by weſt moone. The flood falleth through the Race northeaſt, and the ebbe ſouthweſt.

In the Ilands alſo a north and by eaſt, & ſouth and by weſt moone maketh a full ſea. Men cannot wel reckon the falling of the tydes there, becauſe they haue divers courſes about the Ilands, but for the moſt part northeaſt and northeaſt and by north. A quarter of the tyde the flood falleth thwart into the Caskets.

In Garnſey a north and by eaſt, and ſouth and by weſt moon maketh full ſea.

At Concalle and Granville a weſtnorthweſt moone.

At S. Malloes an eaſt and weſt moon maketh high water.

The flood falleth in there at the weſter channell, and goeth out againe at the eaſter channell, men muſt reckon therupon when they will ſaile into theſe channels.

From the Iland Briack in the bay of Benit the flood falleth ſoutheaſt, but in the fareway eaſtſoutheaſt, and weſtnorthweſt.

At the eaſt ſide of the Iland Briack in the road ſouthſoutheaſt. An eaſt and weſt moon maketh there the higheſt water.

Betwixt the Ilands Briack and Garneſey, a weſtſouthweſt moone maketh full ſea, the flood runneth there eaſtſoutheaſt, and the ebbe weſtnorthweſt.

On that coaſt, and within the Caskets the tyde turneth continually againſt the Sunne, ſo that it is there never ſtill water.

Betwixt Sept Iſles, or the ſeven Ilands, and Garnſey in the fareway, a weſtſouthweſt moone maketh full ſea.

Betwixt Briack and the ſeven Ilands, an eaſt and by north, and weſt and by ſouth moone maketh full ſea. The flood falleth there eaſt and eaſt and by ſouth.

Betwixt the ſeven Ilands and the outer rockes of Morlions, the flood falleth in ſoutheaſt vvithin the Triacle Pottes towardes the

green Iland,but in the fareway in the offing, east and east and by north.

At Morlaix and S. Pauls maketh higheſt water a vveſt and by ſouth Moon, but in the fareway in the offing thwart of it,a ſouthweſt and by vveſt, and vveſtſouthweſt Moone.

At the Iſle de Bas maketh high vvater a vveſt and by ſouth moone.

In the fareway there in the offing the flood falleth eaſtnortheaſt, and the ebbe vveſtſouthweſt,and ſo likewiſe from thence all alongſt the coaſt of Bretaigne, unto the Fourne or Vſhant.

Of the depths and grounds.

BEtwixt the Caskets and Garneſey it is 35 and 40 fathom deep,moſt all ſtony ground.

Northweſt about foure leagues from Garneſey is a pit where it is 80 or 90 fathom deepe, els it is thereabouts 40 fathom deep.

Betwixt Ornay and Iarſey it is deep 20 and 25 fathom.

In the fareway of Iarſey, Rockduve and the Iland Briack,it is deep 20,and 25,and 30 fathom.

About the Triacle Pots alongſt the coaſt it is 45 and 50 fathom deep, in ſuch depths men may ſee the land thereabouts. By night it is not good to come nearer that coaſt and the ſeven Ilands, then in 45 fathom.

Thwart of S. Paul de Lion,& the Ile of Bas, 5. leagues from the land it is deep 45 & 50 fathom.

Courſes and Diſtances.

FRom C. de Hague to C. de Voorha, ſouth and by eaſt. 7 leagues.
From C. de Voorha to Granville ſ.ſ.e. 9 leagues.
From Granville to Mount S. Michiel ſouthſoutheaſt 5 leagues.
From Granville to the poynt of Concalle,ſouthvveſt — — 5 leagues.
From the poynt of Concalle to the eaſter chanel of S.Malloes,vveſt & weſt & by ſouth 5. leag.
From the Iland Siſember, before S.Malloes unto C. de Farelle vveſt 4 or 5 leagues.
From C. de Farelle to the Iland Briack vveſt and by north 9 or 10 leagues.
From the Iland Briack to the Pickells vveſt and by ſouth — — 2 leagues.
From the Pickels to the ſeven Ilands, vveſtſouthweſt — — 5 leagues.
From the ſeven Ilands to the Triacle Pots weſtſouthweſt — — 4 leagues.
From the Triacle Pots to the Ile de Bas, vveſtſouthweſt — — 9 leagues.
From Ile de Bas to Vſhant w.ſ.w. 16 leagues.
From C.de Hague to the vveſt end of Iarſey betwixt Sarck & Iarſey through ſ.ſ.w. 9 leagues
From the Caskets to the vveſt end of Garneſey ſouthweſt and by ſouth 5 or 6 leagues
From Garnſey to Iarſey ſ. e. and by e. 7 leagues.
From Garnſey to S.Malloes ſ.ſ.e. 16 leagues.
From the ſouth end of Iarſey to S. Malloes, ſouthſoutheaſt 9 or 10 leagues.
From Garnſey to the rockes Rockduves, ſouthſouthweſt 8 or 9 leagues.
From Rockduves to Mankiers eaſt and by ſouth 9 or 10 leagues.
From Rockduves to C.de Farella ſ.e. 10 leagues.
From Rockduves to the rock Camine ſouth and by vveſt 4 leagues.
From Rockduves to the Iland Briack ſouth and by vveſt 5 leagues.
From Garneſey to the ſeven Ilands ſouthweſt and by ſouth 15 or 16 leagues.
From the Caskets to S.Paul de Lion ſouthweſt 29 leagues.
From the Caskets to the Fourne or Vſhant ſ.w.and by w. 45 leagues
Frō the Caskets to the Lizard, w. and w.and by n. 37 leagues
From Garneſey to the Lizart, weſt and by north 37 leagues.
From the ſeven Ilands to the Lizart n.w. and by w. 29 leagues
From the ſeven Ilands to the Staert n.and by w.weſterly 24 leagues
From the ſeven Ilands to Portland north eaſt & by north 32 leagues
From S.Paul de Lion to the Lizart northweſt & by north 29 leagues
From S.Paul de Lion to the Steart north and by eaſt 29 leagues.
From S. Paul de Lion to Portland northeaſt & by north 40 leagues.

Heights.

THe Caskets lie in 49 deg. 48 m.
The ſeven Ilands, or Sept Iſles in 49 degrees

How theſe lands doe ſhewe themſelues at ſea.

Thus ſheweth Garnſey when it is thwart from you about foure leagues.

Garnſey being eaſtnortheaſt from you ſheweth thus.

Thus ſheweth the land betwixt S. Paul de Lion, and the Fourne, when you ſaile alongſt by it foure leagues from the land.

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng: een Fr: mylen 20 in een graedt

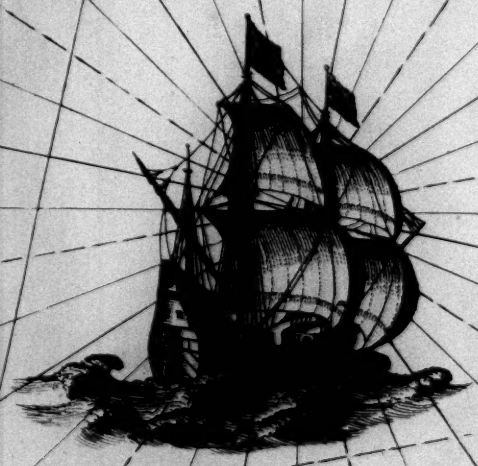
S V S S

Arundel

Bramber

Selsey

Weembrugh



De Cust van Engelandt tusschen de Singels en de drooghten van Weembrugh

Rye

Camberhed

Winckelzee

Fierley

Bevesier

Romney

Singels

Smack

Camber-cast

37

25

67

CHAP. IIII.

The coast of England from Dover and Dongie Neſſe unto neere the Iland Wight.

THE poynt of Dongie Neſſe lyeth from Dover ſouthweſt and by weſt diſtant 9 leagues. At the eaſt ſide of the Neſſe in Romans bay, thwart of the Romans Tower, is a good roade for weſt and ſouthweſt windes: for to anckor there, run ſo farre in the bay, that the poynt of the Neſſe be ſouth and ſouth and by weſt from you, ankor there in about 7 or 8 fathom; you may alſo ankor on the weſt ſide of the Neſſe, for a northeaſt winde, ſo that the point lye eaſt and by north from you.

Road under the Neſſe.

For to ſaile into the Camber of Rye coming from the weſt, you muſt keep Beachy without the poynt of Fairlee, and run ſo towards the Neſſe, and being come in faire by it, run in within two cables length alongſt by it, unto the end of the Neſſe, then edge up to the weſtwards, and leaue the beacons upon the ſtarboord ſide, vntill you come before the caſtle Camber, that ſtandeth vpon the ſouther chindle, there you may anckor in 4 and 5 fathom: from thence alongſt even vnto the town of Rye, it is all ſet with beacons, which ſtand alongſt by the eaſt ſide of the Deep, vpon the Daries, which at low water fall dry. In ſayling unto Rye, you muſt leaue all the beacons on the ſtarboord ſide, and run indifferent cloſe alongſt by them.

Camber of Rie.

The poynt of the Neſſe and Beachy lye w.ſ.w. and e.n.e. diſtant 8 leagues. Beachy is by the ſeven white Cleeves, the beſt knowne land that a man can ſee any where. To the eaſtwards of Beachy men may anckor for weſterly windes in 6 or 7 fathom, ſo that the point be ſouth and ſouth and by weſt from you. To the weſtwards of the poynt of Beachy, thwart of the weſt end of the ſeven Cleeves, right againſt the Chindle, where men run alongſt by into new Haven, men may alſo ankor in 7, 8, or 9 fathom.

Road under Beachy.

A league and a halfe to the eaſtwards of the point of Beachy, neareſt e. n. e. from the poynt, lyeth a little ſand, vpon which there is at low water & ſpring tydes ſcarce two fathom.

At the weſt end of the ſeven Cleeves lyeth the river of Cuckmer haven, or new Haven, which hath two entries, the weſtermoſt entry lyeth in by the weſt land, but is not to be uſed, but onely with very ſmall ſhipping, it falleth altogether dry; the eaſtermoſt is commonly the beſt, and lyeth northweſt and by weſt in, there is at high water with a common tyde, not more then ſeven, and with a ſpring tide 14 or 15 foot water; within, the ſhips lye every tyde dry: but before the village they remaine a floate, there they morre with foure cables faſt on two green ſhores. Vpon theſe entries men cannot well make any reckoning, they keep no certaine depth, when it bloweth a ſtorm out of the ſouth, they are oftentimes caſt too with chindle, and opened again with a freſhut.

New haue.

Shorum is a tyde-haven, where is at high water, and ſpring tydes, 18 foot water, but at low water there remaineth no more then 3 foot water, ſo that then it floweth there 15 foot up and downe. With a common tyde at high water there is 12 foot, and at low water three foot depth. The towne Shorum lyeth a little English mile within the haven, ſhips (that draw but 8 or 9 foot water) can lye afloate a little beneath the town at low vvater, orelſe they lye dry every vvhere.

Shorum.

When you come from the eaſtwards from Beachy or new Haven along by the ſhore, you may ſee open into the haven, before you come thwart of it: but coming from the vveſtwards you ſhall not ſee it open before you come right before it, becauſe the vveſt poynt lyeth ſomewhat further out then the eaſt poynt. From the vveſt poynt runneth off a litle taile, but at high water you may run in alongſt over it, otherwiſe you muſt run in by the eaſt ſhore. Vpon the eaſt point ſtand two beacons which you muſt bring one in the other, & run in ſo right vvith them vntill you come by the north ſhore, & then in alongſt by the foreſayd north ſhore.

At Shorum ſometimes there are builded many great ſhips of three or foure hundred tunnes.

About 8 leagues to the vveſtwards of new Haven lyeth Arondell, a tyde haven, vvhere a ſhip may go in at halfe flood, you muſt goe in there by the vveſtland northeaſt in. In the entry it is two, and betwixt the two lands three fathom deep at high vvater: but vvithin in the haven remaineth at low vvater 4 and 5 fathom: there you muſt ankor before the village.

Arondell.

Fiue leagues w. ſ. w. from Arondell, & 13 leagues vveſt and by ſouth ſomevvhat vveſterly from Beachy, lye the bankes or ſhowlds of the Owers vnder vvater, a great league and a halfe a ſeabord the land.

Owers.

About two leagues e.n.e. ſomevvhat eaſterly from the ſouth ſide of the Owers, & two litle leagues ſouth from Arondel, lyeth a ſhowld of rocks & chindle, called Eaſtborrough-head, as great as an aker of land, vvhich falleth (at low vvater and ſpring tyde) dry, otherwiſe it commeth not aboue vvater, cloſe to it, it is 15 fathom deep. They that ſaile off from the haven of Shorum, and are bound to the vveſtwards, muſt not go more vveſterly then ſ.ſ.w. vntil they come in 18 fathom, before they ſet their courſe more vveſterly for fear of this ſhowld. About an English mile n.w. from this foreſaid ſhowld, lyeth alſo a ſunken rock, vvhereupon at low vvater is no more then 5 or 6 foot vvater.

Eaſtborrough-head.

About halfe vvayes betwixt Arundell & Selſey runneth off a ledge of rockes thwart to the ſouthwardes from the ſhore, about an English mile and a halfe into the ſea, called the Bogners, vvhereof ſome of the rocks fall dry at low vvater, but the outermoſt are alwayes vnder vvater.

Of the tydes, and courſe of the ſtreames.

BEtwixt Dover & Dongie neſſe, & likewiſe thwart of the Neſſe, a ſ.ſ.w. moone maketh full ſea.

In the chanel of VVinchelſy a ſouth & by eaſt moon.

At Beachy by the ſhore a ſ.ſ.e. & n.n.w. Moone.

In the fareway thwart of it, a ſouth & north Moon.

From Dongieneſſe to Dover the flood falleth northeaſt and by eaſt, & the ebb ſouth vveſt and by vveſt.

From Beachy to the Neſſe e.n.e. and w.ſ.w.

At Beachy by the ſhore before the ſeven Cleeves the flood falleth eaſt by ſouth, and the ebbe w. and by n.

From VVight to Beachy e. and by n. and w. and by ſ.

Depths.

BEtwixt VVinchelſy & Pickardy in the middeſt of the chanel it is deep 26 and 27 fathom, upon ſuch depth men may ſee Fairlee and the land of Dover.

VVithout Beachy thwart of the ſeven cleeves it is deep 28 and 30 fathom.

Courſes and Diſtances.

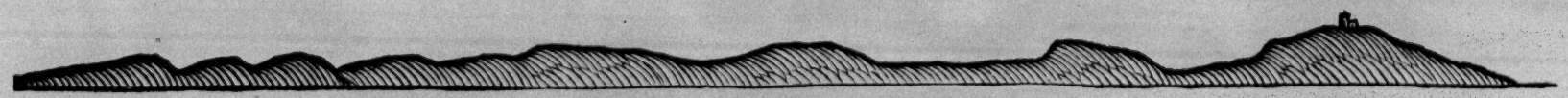
From Dover to Dongie neſſe ſ. w. and by w.	9 leag.
From the Neſſe to Fairlee, w.ſ.w	3 leag.
From Fairlee to Beachy w.ſ.w.	5 leag.
From Beachy to the Owers w. & by ſ.	13 leag.
From thwart of the Owers in 12 fathom unto Dunoſe the ſouth poynt of VVight, vv.ſ.w.	5 leag.
From Beachy to Blackneſſe eaſt	20 leag.
From Beachy to Struyſaert ſouth	24 leag.
From Beachy to the Caskets ſ.w. and by w.	37 leag.

Heights.

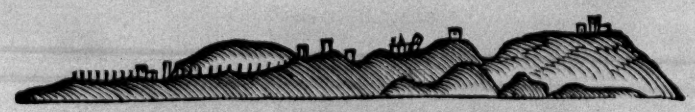
Beachy lyeth in 50 degr. 48. min.

How

Howv theſe lands doe ſhevv themſelues at ſea.

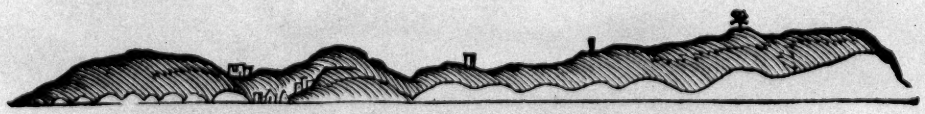


Thus ſheweth Fairlee when you come from the Weſt.



Thus ſheweth Fairlee, when you ſaile alongſt by it foure leagues from the land.

Beachey ſheweth thus when you come from the Weſt.



Thus ſheweth Beachey with the ſeven Cleves, when you come from the Weſt, and ſaile alongſt by it.

De Cuſten
van Engelandt
uſschen de droochte
van Weembrugh
en Poortlandt

Poie

Wayjmouth

S. Andries Landt

Studlandt

Sandwichs

Hanfaſt point

Sandwich Baij

Slot

Slot

Poort
landt

't Ras van Poortlandt

Peverel point

Duitſche mijlen 15 in een graedt

Spaenſche mijlen 17½ in een graedt

Eng: en Fr: mijlen 20 in een graedt

Hampton

Chicheſter

Calſnot caſt.

Portſmouth

Hurſt caſt

Selſey

Newton

Neuport

De naelden

S. Helene

Eylandt Wicht

Sinaeclyf

Weembrugh

Wolferts horn

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CHAP. V.

The Coaſt of England from VVight to Portland.

The Owers.

THE Showlds or bankes of the Owers, lye about foure leagues to the eaſtwardes of Wight, and lye off a league and a halfe from the land, thwart of them ſtandeth a tower in the land, when that is northnorthweſt from you, then are you thwart of the ſouthermoſt part of the ſhowld; and if you keepe the Culver cliffe of Wight weſt and by north, and weſtnorthweſt from you, comming either from the eaſt or from the weſt, you can take no hurt of the Owers; you may runne alongſt by them in twelue fathom upon your lead, vvithout danger. If you ſaile away from the eaſt end of Wight, eaſt and by north, and eaſtnortheaſt, you ſhall run in twelue fathom alongſt over the caſt end of them. He that is there well acquainted, may alſo ſaile to the northwards of them, through between the land and the Owers.

Culver-cliffe.

Betwixt the Owers and Portſmouth goeth in a great ſound or haven, vvithin it lyeth the town of Chicheſter.

Chicheſter

At both the ſides of the Iland Wight men may ſayle within it, and there come to anckor, either under S. Ellens, or before Newport vvhere they will.

For to ſayle into the eaſtwards of Wight, you muſt bring the eaſter caſtle that lyeth to the eaſtwards of Portſmouth, over the Lyme-kill (that is, a white ſpot in the land to the northwards of that caſtle) and keepe them ſo one over the other vntill that the Culver cliffe come within or under the northeaſt poynt of Wight. Then bring the Lime-kill over the eaſt end of Portſmouth, and keepe them ſo vntill that the caſtle to the vveſtwardes of Portſmouth come to the wood: thus doing, you ſhall not come neere neither plate nor ſand to take any hurt of them, and you ſhall come ſo by litle and litle, before S. Ellens Church. When the caſtle of Wight commeth without Culver cliffe, and S. Ellens church come two ſhipps lengths vvithin the red poynt, then you ſhall not come too neere the riff at the poynt. Or els if you cannot ſee the Lyme-kill, then keepe the Caſtle to the weſtwards of the Culver cliffe, vntill that S. Ellens church come a ſhips length vvithout the poynt of the Iland, goe then boldly northweſt in, and you ſhall not come too neere the riffe; and then bring the ſquare tower betwixt the eaſt end of Portſmouth, and the Caſtle: vvhen the Caſtle to the vveſtwards of Portſmouth commeth to the eaſt ſide of the vvood, then you ſhall not (as here before is ſayd) come too neere neither the plate nor the ſand to take any hurt of them.

For to ſaile in at the eaſt end of Wight.

When the eaſtermoſt vvhite ſpotte ſtandeth a ſhippes length to the vveſtwardes of the Caſtle, then you are to the eaſtwardes of the riffe: And vvhen the Culver cliffe is covered or hidden behinde the northeaſt poynt of the Iland, then are you alſo within the riffe.

The markes of the litle plate are theſe: there ſtandeth a ſquare Tower vvithin the land, and a Caſtle on the vvater ſide to the eaſtwardes of Portſmouth, thwart from it lyeth the foreſayd Lyme-kill: vvhen that commeth to the eaſtwardes of the foreſayd Caſtle, ſo that you may even ſee through betwixt them both, then are you vpon the litle plate, vvhich at low vvater is not deeper then ten foote: then ſtandeth the Caſtle to the vveſtwardes of Portſmouth, at the vveſt ſide of the vvood. But vvhen the foreſayd ſquare Tower commeth to the vveſt ſide to the foote of the Caſtle, and the Caſtle by weſt Portſmouth to the weſt ſide of the wood, there it is deepe at low water upon the litle plate twelue foot.

Markes of the Plate.

When the ſquare tower ſtandeth betwixt the eaſt end of Portſmouth, and the caſtle, even betwixt the Lyme-pit and the tower, and the caſtle by weſt Portſmouth in the vveſt ſide of the vvood, there it is at high vvater, ten fathom deepe.

When Saint Ellens Church lyeth ſouthweſt and by vveſt from you, then lyeth the ſoutheaſt end of the plate northeaſt and by north from you, and the vveſt end north and by eaſt.

From the poynt of the Roade of Newport eaſtwardes, lyeth a broad ſand alongſt the ſhore, called Nomans-land, vvhich falleth almoſt drye at lowe vvater, it is ſo ſteepe, that halfe a cables length off from it, it is twelue fathom deepe: vpon the high land of Wight thereabouts ſtand two or three milles. If you come ſo neere the ſhore, that the foreſayd milles be hidden behind the foreſayd high land, you ſhall not miſſe to come aground againſt that foreſayd ſand; but ſo long as you can ſee theſe milles, you ſhall goe cleare of it.

Nomans land.

The Roade of the Cowes is the beſt Roade in Wight. Over againſt, betwixt that and Calſhot caſtle, lyeth a hard ſand, neereſt the north ſhore, lying from thence to the vveſtwardes alongſt the fareway, almoſt ſo farre as thwart of Newton, called the Brambles; at low water and ſpring tydes it falleth almoſt drye, and then the ſea breaketh much vppon it: to the northwardes of it goeth alſo a channell through, but it is not to be vſed, but vvith ſmall ſhipping.

The Brambles.

For to ſaile in at the weſt end of Wight, you muſt runne right in vvith the Needles, (they

For to ſaile in at the Needles.

(they are high ſharpe rockes as maſtes lying at the vveſt end of Wight) bring then the innermoſt poynt of Wight, or the Caſtle that ſtandeth upon the Chindle over againſt that poynt called Hus caſtle, a litle without, or to the northwards of the Needles, ſaile in thereupon, untill you come to the Needles, leaue them then on the ſtarbord ſide of you, & run in within a cables length alongſt by them for to avoyd the bankes vvhich lye off from the chindle to the northwardes of the Needles, of the vveſt end of Wight almoſt to the Needles. Betwixt the bankes called the Swingells, and the Needles, it is not very broad, and at low vvater fiue fathom deepe. When you ſaile in here, you muſt caſt your tydes well. The fore-flood falleth ſtrong vpon the Needles, and the ebbe to the contrary very ſtrong vpon the banks. When you are then come vvithin the Needles, then edge a little more off from the ſhore vnto Hus caſtle that ſtandeth vpon the chindle, for to avoyd ſome rocks vvhich lye alongſt by the land under water. Being come within the Caſtle or Chindle, there it is wyde and broad, leaue two third parts of the channell on the larbord ſide, and one third part on the ſtarbord ſide, ſaile ſo in untill you come before the village Newton, and ankor there in nine or ten fathom, or els ſaile forth (if you vvill) about the poynt of the Cowes, and ankor there before the haven of Newport in tenne or twelue fathom, there is the beſt roade, and the beſt lying of all the roades in Wight. The haven or roade before Newport lyeth from the foreſayd Hus caſtle upon the chindle northeaſt and by eaſt, and eaſtnortheaſt about two leagues aſunder.

Peverell poynt. Sandwitch Bay.

From the Needles of Wight vveſt and by ſouth about three leagues, lyeth the poynt of S. Albons land, called Peverell poynt, from it lye off ſome litle rocks to the eaſtwards. A little to the northwards of that poynt is a Baye called the Baye of Sandwitch, there is a good road for them that are bound to the vveſtwards; If you vvill goe to ride there comming from the vveſtwardes, you may take the ſounding of Saint Albons land, and runne aboord the poynt in foure or fiue fathom at halfe flood, and you ſhall take no hurt of thoſe little rockes. Being gotten about the poynt, edge by it vp to the vveſtwardes towards Sandwitch. A little to the northwards of Sandwitch in the Bay, lyeth a round hommock, and thwart of it ſomewhat within the land ſtandeth a mill; bring that mill to the ſouth ſide of the round hommock, and ſaile ſo in untill you come in foure or three fathom, and ankor there ſo deep or ſhowld as you vvill, there it is good lying for ſouthweſt or ſouthſouthweſt windes.

Handfaſt poynt.

A little league north and by eaſt from the foreſayd poynt, right vveſt from the Needles of Wight, lyeth another poynt, called Handfaſt poynt, to the northwards of it lyeth a litle towne called Studland, before it is alſo a good road. Vpon the outermoſt part of that poynt, is a hole through the land, vvhere men may ſee through, and a litle vvithout the poynt ſtandeth a high ſteep rock like a maſt, almoſt like the Needle at the weſt end of Wight. For to come to ride before Studland, you muſt ſaile about the ſecond poynt, with the hole or the ſteepe rocke, in foure or fiue fathom, and goe in vveſtnorthweſt towards Studland: a litle to the ſouthwards of it lyeth a litle valley, bring that vveſtſouthweſt from you, and goe towardes the ſhore, in foure or three fathom and a halfe, there is the beſt roade, and lying there, you may ſee the foreſayd hole in the poynt. Studland.

A league to the northwardes of the foreſayd poynt vvith the hole, lyeth the haven of Poole; for to ſaile in there, comming about the foreſayd ſecond poynt with the ſteepe rocke, you muſt goe on northweſt, or ſomewhat more northerly, and then you ſhall ſee right a head of you, a high flat hill, which ſtandeth higher then the other land thereabouts, keepe that betwixt the two ſhores, and runne in ſo right with it. If you muſt turne to and again, then ſpare not to vſe your lead, and runne not further over to the vveſtwardes, then that the flat hill come to the vveſt land, ſo ſoone as it beginneth (as it were) to touch it, you muſt caſt about, or elſe you ſhould be faſt aground: And after you haue caſt about, runne not further over to the eaſtwardes, then that the foreſayd high flat hill commeth even to the eaſt ſand hill, which is a high, gray, and ſharpe ſand hill, lying at the eaſt ſide. If you keepe theſe foreſayd markes in this manner, you ſhall haue there going in at halfe flood, water enough, there remaineth upon the ſhowldeſt at low water, ten and eleven foote, but it floweth there no more then fiue foote up and downe. It floweth there twice in a tyde. A ſoutheaſt and northweſt moone maketh there full ſea: alſo a ſouth and by eaſt and north and by weſt moone once more, that cometh to paſſe by reaſon of the fore-ebbe that commeth out of Wight. When you come within the entry, goe then northnortheſt on, and keepe the beacons that ſtand on the eaſtland, on the ſtarboord of you, and runne indifferent cloſe alongſt by them. The ſhoares are on both ſides ſteepe, and the channell is not wyde, without the channell it is ſhowld or flat. This is Pilotes water. Poole.

From the Weſt end of Wight to the poynt of Portland, the courſe is vveſtſouthweſt eleven leagues, but from Dunnoſe, the ſouthermoſt poynt of Wight, weſt and by ſouth thirteene leagues. Portland.

If

If you will go to ankor under Portland (comming from the west) then run within two cables lengths, or a shot of a cast peece about by the poynt of Portland, and being come about the second poynt, edge up to the westwards, untill you come before the castle, and ankor there in 7, 8, 9, 10, or 11 fathom, so that the poynt of Portland doe lye south and by east, and s. s. e. from you, there you shall lye land-lockt for a south and south and by east winde. With a southwest and a s.s.w. winde, men must bee very mindfull of the terrible rippeling of the race of Portland, which beginneth a litle to the eastwards of Portland, and endeth a litle to the westwards of S. Albons. The ground in that race is also very uneven, and showld, sometimes seven, otherwhiles ten, and also fifteen fathom deepe.

Road under Portland.

About a league to the northwards of the road of Portland, lyeth a litle Towne called Waymouth with a tyde-haven; before it men may ankor in foure or fiue fathom.

Waymouth.

Of the tydes, and course of the streames.

THwart of Wight, before Dunnose, a south and by east moone maketh full sea.
At S. Ellens and the Cowes a s.s.e. moone.
At Hampton at the kay, a south & north moon.
Within the Needles of Wight a southeast and by south moone.
Before the haven of Poole a southeast & northwest moon maketh high water: also a south and by east and north and by west moone.
Thwart of Portland in the channell a s.s. e. and n.n.w. moone.
From Portland to Wight the flood falleth east and by north, and the ebb west and by south.

Depths.

IN the offing thwart of Wight it is deepe 38 fathom, in such depth men may see the land.

In the chanell betwixt Portland and the Caskets it is 40 fathom deepe, when it is cleare weather men may see the land on both sides: the neerer England the showlder, towards the Caskets it is deepest.

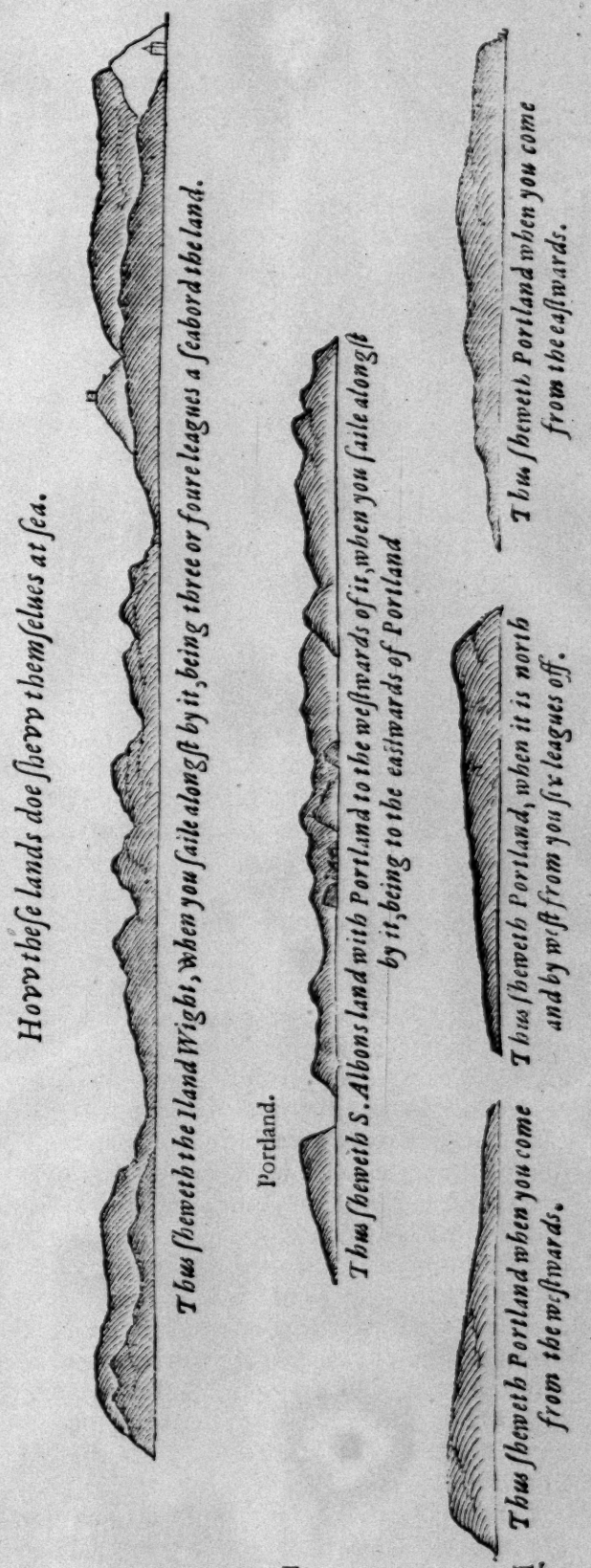
Courses and Distances.

FRom Dunnose the southermost poynt of Wight, unto the Needles of Wight, west and and by north, and w.n.w. 4 leagues.
From the west end, or the Needles of Wight, to the poynt of S. Albons land west 4 leagues.
From the Needles of Wight to Portland west and by south, and westsouthwest 11 leagues.

FRom Wight to Deep e.s.e. 37 leagues.
From the east end of Wight to Struysaert s. e. somewhat southerly 29 leagues.
From Wight to the Caskets, southwest and by south 20 leagues.
From Portland to Seynhead south east and by east 37 or 38 leagues.
From Portland to the Caskets south and by east 13 leagues
From Portland to S. Paul de Lion southwest and by south 40 leagues.
From Portland to Vshant southwest 53 leagues.

Heights.

DVnnose the southermost poynt of Wight lyeth in 50 deg. 36 min.
Portland lyeth in 50 deg. 30 min.



CHAP. VI.

The coast of England betvvixt Portland and the Steart.

FROM Portland to Exmouth the course is westnorthwest thirteene leagues; betwixt them both lyeth a little Iland close by the land called Cob. Before Exmouth men may ride (at the south end of the Chindle, which lyeth before the haven) in seven or eight fathom, so that the rocks of Tomanstones doe come to lye south and south and by east from you, there it is good ground, and land-lockt for a south winde.

I. Cob.

Fiue leagues south and south & by west from Exmouth lyeth Torbay, and lyeth from Portland west, and west and by south distant thirteen leagues.

Torbay.

For to go into the roade of Torbay, you must bring the west poynt south & by east and southsoutheast from you, and anckor there in seven or eight fathom, you shall lye land-lockt for south and southwest windes. At the northeast side of the bay is also a tyde-haven, before it, is good ankor ground in foure or fiue fathom, according as you will lye neare or farre from the shore.

Dartmouth.

Three or foure leagues southwards, or to the westwards of Torbay, lyeth the haven of Dartmouth, which hath a narrow entry, lying in betwixt two high lands, upon each side of the haven standeth a litle castle, in time of warres they were wont to shut it over vvith a chaine, on the vvest side standeth a little Church on the high land. For to saile in there comming from the Steart, or from the vvestwards, you must run in alongst by the vvester land, so farre to the eastwards untill you bring the kay of the village (that lyeth on the east side of the haven) in the middest of the entry of the haven, and saile so in, keeping the middest of the haven betwixt the two lands, and you must bee very ready with the boate (if there should come any foreflaughes from off the high land) for to tow in. Being come in, edge over to the vvest side, before the Brewhouse, and ankor there in ten or twelue fathom, or before the village on the east side, where you please.

At the east side of the Range lyeth a suncken rock, the markes for to avoyd it are these. To the eastwards of Dartmouth is a red poynt, vvhich below by the water is black, and in the red lyeth a vvhite stone, vvhen the vvhite stone commeth over the black poynt, then are you thwart of the suncken rocke; but if you see the kay of the village, and doe as before is sayd, then you shall not come too neare that suncken rock to take any hurt of it.

Betwixt Dartmouth and the Steart, neareſt to Dartmouth, standeth a spire steeple indifferent high and white, called Tackman, that is a very good marke to know the haven of Dartmouth by it.

The Steart lyeth from Dartmouth southwest distant three leagues. Vnder the poynt of the Steart at the east side is a good roade for vvesterly vvindes, betwixt the litle church that standeth vpon the high land, and the poynt of the Steart, in ten or eleven fathom, so that the poynt lye southwest from you.

Steart.

Of the tydes and course of the streames.

IN Dartmouth and Torbay a west & by south moone maketh full sea.

Thwart of the Steart in the channell, a vvestnorthwest and eastsoutheast moone.

From the Steart to Portland in the middest of the channell the flood falleth eastnortheast, and the ebbe vvestsouthwest.

Thwart of Dartmouth by the land, the flood falleth northeast and by north, and the eb southwest and by south.

Thwart of Torbay towards Exmouth in the bay the flood falleth northnortheast, and the ebbe southsouthwest.

Of the depths.

THE Steart and the land of Dartmouth men may see them both in fiue and forty fathom.

Courses and Distances.

FRom Portland to Exmouth westnorthwest — —	13 leagues.
From Exmouth to Torbay south	5 leagues.
From Torbay to Dartmouth s. w.	2 leagues.
From Dartmouth to the Steart s. w.	3 leagues.
From Portland to Torbay west somewhat southerly — —	13 or 14 leagues.
From Portland to Dartmouth west and by south — —	16 leagues.
From Portland to the Steart westsouthwest westerly	18 leagues.
FRom the Steart to the Caskets eastsoutheast — —	19 leagues.
From the Steart to the Sept Isles, south and by east easterly.	24 leagues.
From the Steart to S. Paul de Lion south and by west	29 leagues.
From the Steart to Vshant southwest and by west	40 leagues.

Heights.

THe Steart lyeth in or as some will hold, more northerly.	50 degr. 12 min.
Torbay lyeth in	50 degr. 25 min.

How

Duytſche mylen 15 in een graedt

Spaenſche mylē 17½ in een graedt

Eng: en Fr mylen 20 in een graedt

De Cuſt van Engelandt tuſſchē Poortlādt en Goutſtart.

Excester

Exmouth

Start point

Sidmouth

Toemans stouen

Jingmouth

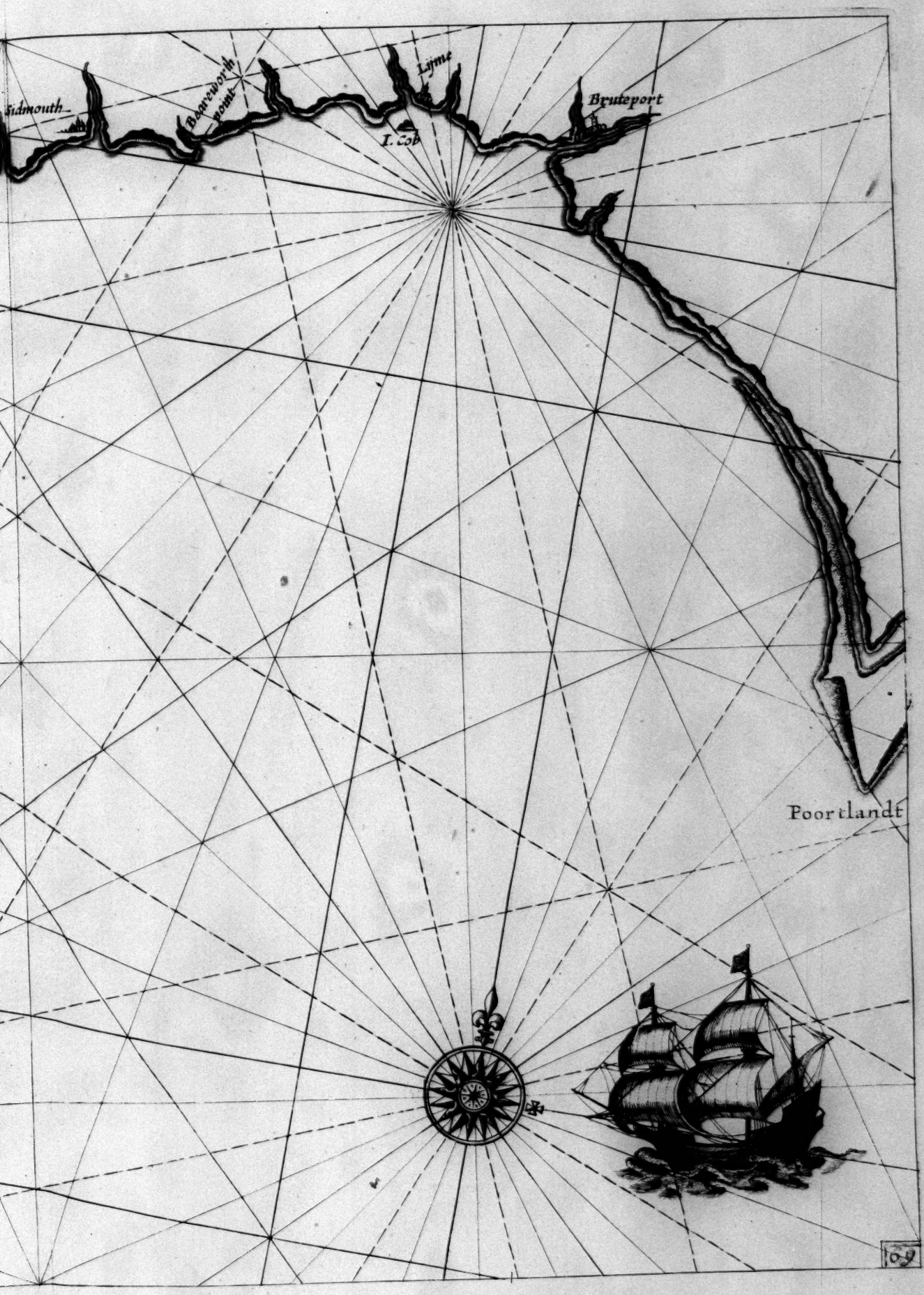
Darmouth

Dortmuyen

Torbay

Start point

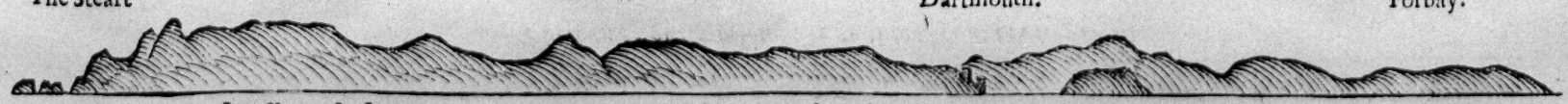
Goutſtart


Sidmouth
Beerworth point
Lime
I. Cob
Bruteport
Poortlandt

Hovv theſe lands doe ſhevv themſelues at ſea.

Thus ſheweth the land to the weſtwards of Portland, when you ſaile alongſt by it.

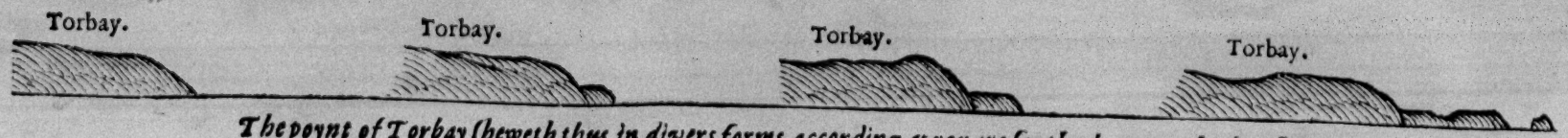
The land betwixt Torbay and the Steart ſheweth thus.



Thus ſheweth the land betwixt Torbay and the Steart, when the Steart is ſouthweſt and by weſt from you.

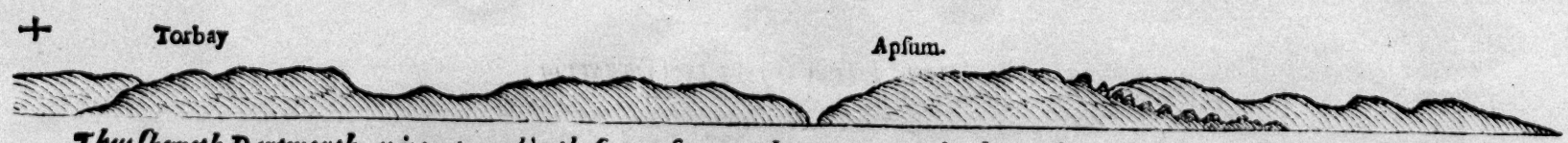
Thus ſheweth the land betwixt Torbay and the Steart when the Steart is weſtſouthweſt from you.

betwixt Portland and the Steart.



The poynt of Torbay sheweth thus in divers forms, according as you are southerly or northerly off from it.

These two figures belong one to the other at the two crosses.



Thus sheweth Dartmouth, as is portrayed in these two figures, when you are right thwart from it a league or two from the land: with the land on both sides of it, as well towards the Steart as towards Torbay, and to the northwards of it.

Duÿtsche mÿlen 15 in een graedt

Spaensche mÿlen 17½ in een graedt

Eng: en Fr: mÿlen 20 in een graedt

CORNW

Truro

Perÿn

Vaelmuyen

Mauſe

Maus caſt.

Penduan

Gwin

Doodmanshoofd

Lezard

30

De Cuſten
van Engelandt
tuſſchē Goutſtart
en Lezard

A L

Vißchers dorp
Pleimuyen
Westcombe
Milbrok
Kattewater
Egdoomb
Tolland point
Westbrouck
Ramshoogh
ILou
Kerrebroot
Mouſton
Wemberije
Lammemouth
Meeuſtoen
Ideſton
I. S. Michiels
Bult point
Salcomb haven
Startpoint
Goutſtart

CHAP. VII.

The Coaſt of England betvvixt Portland and the Lizart.

Salkom. A Litle to the eaſtwards of the weſtermoſt poynt of the Steart, lyeth a haven called Salkom, when you come from the weſt, it ſheweth it ſelfe open, the weſt ſide of it is ragged, & the eaſt ſide goeth ſloping down, cloſe to the weſt poynt lyeth a rock, or a rane of rockes, therefore you muſt giue it a good birth, and leaue the rockes on the larboord ſide: further, you may ſee all breake that can doe you hurt. Being come within the poynts, you can take no hurt of neither of both ſhores. Vpon the barre, or ſhowldeſt of the entry, remaineth at low water with a ſpring tyde, not leſſe then eleven foot water, and againe within it is at leaſt three fathom deepe.

Plymouth. Sixe leagues to the weſtwards of the Steart, lyeth the Sound of Plymmouth, at the outermoſt eaſt poynt of the Sound lyeth a high Mewſtone. round rock, called Mewſtone, the weſt point is called Ramehead, betwixt them both goeth in the Sound of Plymmouth northnortheaſt in, it is broad and deepe. A little to the northwards of Ramehead is a faire ſandy bay, where men may anckor cloſe under the land, in nine and ten fathom. Three leagues ſouth a litle eaſterly from Rame-head, lyeth a rock aboue water, called Eddy-ſtone. The poynt of Eddyſtone Plymmouth lyeth from the Eddy-ſtone north and by eaſt, and northnortheaſt, diſtant about foure leagues. In the Sound, by the land of Plymmouth, lyeth a litle Iland, which is faſt to the weſt ſide with a riffe or rane of rockes under water, ſo that men muſt ſaile alongſt to the eaſtwards of it, whether they be bound into Catwater, or into Hamoaſe, the weſt harCatwater brough. If you will goe into Catwater, then runne in betwixt the Iland, and the poynt on the eaſt ſide in with the land of Plymmouth, vntill that you ſee Catwater open on the ſtarboord ſide of you, go then in to the eaſtwards betwixt the poynt of Plymmouth, & the foreſayd eaſt poynt on the ſtarbord ſide of you, leaving the moſt part of the channell on the ſtarboord ſide of you, vntill you come within the poynt, and anckor there right againſt that high ſteepe norther land, there it is at low water with an ordinary tyde, foure and fiue fathom deepe.

When you ſail into Catwater you muſt take heed, and giue a good birth to the ſouther poynt of the entry of Catwater, for there lyeth off to the weſtwards from the foreſayd poynt, a ledge of rockes under water, neere about two cables lengths from the land, and upon the poynt of the ledge or ſhowld, lyeth a buye where is at halfe flood about twelue foot water, which buye you muſt leaue on your ſtarboord ſide in going into Catwater, and when you haue Catwater altogether open, you may runne into the eaſtwards, leaving (in the entry of the harbour) two third parts of the channell on the ſtarboord ſide, as before is ſayd, becauſe the ſouth ſhore is ſomewhat flat off, there lying a ſandy banke, which reacheth to the ſecond poynt of the ſouth ſhore of Catwater.

A litle to the eaſtwards of that foreſayd litle Iland, lyeth a rocke under water, vpon which it is at low water not deeper then two fathom. For to ſaile within the Iland, you may goe in to the eaſtwards, or to the weſtwards of the rock, according as occaſion ſhall ſerue. If you will ſaile into Hamoaſe, to the weſtwards of the rock, then take the ſounding of the Iland in foure or fiue fathom at low water, and runne in ſo by it, vntill that the Fiſher Village (lying to the northwards a little within the land) come to the weſt ſide of the valley on the north ſhore, then are you runne through betweene the Iland and the rock, and to the weſtwards of the rock. Within the Iland, vpon the land of Plymmouth, ſtandeth a wall or hedge, when as you ſee that on endling, and the chappell of the foreſayd Fiſher-village commeth to the northſide of the valley, and Catwater commeth open; then doe you runne over the rocke. Betweene the Iland and the maine men may anckor in twelue and thirteen fathom.

If you bee bound into Hamoaſe, you muſt Hamoaſe. runne in betweene the Iland, and the land of Plymmouth, and then in amiddeſt the channell betweene the two lands, vntil that the entry of Hamoaſe be open, runne then into the northwards, as the channell leadeth, vntil you come in about the weſt point, and ankor there in ſixteen, fifteene, and twelue, or ten fathom. In the narrow it is fifteene, ſixteen, ſeventeen, and alſo twenty fathom deepe, and betweene the Iland and the maine, eight, nine, tenne and twelue fathom.

About a halfe cables length to the eaſtwards The German a ſunken rock. of the eaſt poynt of the paſſage way going into Hamoaſe, lyeth a ſuncken rock under water, called the German, about two great ſhips lengths from the ſhore, and at low water hath not aboue foure foote water upon it. And when men do come any thing neere this foreſayd ſuncken rock going into Hamoaſe, either with

with the flood or the ebbe, the tyde will ſet them right vpon it, if it bee calme. Therefore for to avoyd it, men muſt (with calme weather) giue this foreſayd ſuncken rocke a good birth, untill they bring the houſes of the Fiſher village called Stone-houſe, open of the eaſter poynt of the paſſage way, and then runne in over towards the north ſhore, vntill they haue hidden the Iland in the foreſayd eaſter poynt of the paſſage way, for to avoyd a ſuncken rock that lyeth off to the eaſtwards from the north poynt of the Beach of the weſt ſide of the paſſage way, a halfe cables length off, and then runne in amids the channell into Hamoaſe. Vpon this foreſayd ſuncken rock at low water, is not aboue three or foure foot water.

Suncken rock.

In the Sound of Plymmouth, not farre to the northwards of the Meweſtone, lye two or three ſuncken rockes, upon which remaine at low water, not more then three or foure fathom water, the markes of them are theſe: to the eaſtwards of Plymmouth ſtandeth a Tower with a Mill, and to the weſtwards of the foreſayd litle Iland ſtandeth a Gentlemans houſe, vvhen the litle tower or turret of that houſe commeth over the poynt on the weſt ſide of the Iland, & the foreſayd Tower and Mill to the eaſtwardes of Plymmouth come one over the other, then are you vpon the innermoſt ſuncken rocke or ſhowld, which is at low water foure fathom deepe. But when the poynt of Hamoaſe cometh even without the poynt to the weſtwards of the Iland, and the foreſayd tower and mill alſo one in the other; then are you upon the outermoſt rocke; where it is at low water and ſpring tyde, three fathom and a halfe deepe.

Sunken. rockes.

Low Iland

From Ramehead weſtſouthweſt fiue leagues, lyeth Foy, and betwixt them on the coaſt lyeth a litle Iland, a litle to the eaſtwardes of a poynt called Talland poynt, thwart of Weſt Louwe called Louw Iland, you may anckor there to the eaſtwards of the Iland in fiue or ſixe fathom.

Foy.

Foy is a bard haven, where a ſhippe may goe in at halfe flood, at the eaſt ſide of the haven ſtandeth a litle Church with a litle ſteeple, and on the weſt ſide a white Church ſomwhat greater then that upon the eaſt land, with a ſquare ſteeple at the weſt end of it.

For to ſaile into Foy, you muſt haue at leaſt a half flood, and run in midſt the chanell betwixt the two poynts, and being come within, then chuſe which ſide you will, but the moſt water is by the weſtland, between the Stakes and the Tower that ſtandeth upon the weſt land. Beeing come within the Stakes (as you come in by the weſt land) then beare ſomewhat off preſently from the weſt ſhore, almoſt into the middle of the channell, neereſt to the weſt ſhore, vntill you come before the village that lyeth on the weſt ſide, there is a deepe docke, vvhere a ſhippe that draweth ſixteen foote water may lye afloate at low water. In the ſayd dock may three or foure ſhippes lye.

If (when you come in by the eaſt land) you deſire to be in the foreſayd docke or poole, then ſaile in untill you come within the ſtakes, and then edge over off from the eaſtland, untill you come neereſt the weſt land for to avoyd a Flat vvhich lyeth by the eaſt ſhore alongſt the haven, and beginneth againſt the firſt houſe of the weſt village. If it ſhould happen, that you could not lead it in with a ſail, then let your ankor fal without the ſtakes, and warpe in with hawſers, untill you come into the foreſayd poole.

You may alſo ſaile ſo farre in, that you may ſee a wall on the weſt ſide of the haven, where lyeth a village behinde it. A ſhippes length to the ſouthwards of that wall, it is good lying by the eaſt land, being morred by foure cables, there may alſo a ſhip ride afloate that draweth ſixteen foot water. You may alſo ſaile further in alongſt by that Swach that lyeth on the weſt ſide, wherin the mill ſtandeth, but come not too neere the north poynt of the ſwach, for there by it lyeth a rock vnder water, being paſt that you may morre your ſhippe in the middeſt of the channell, there is beſt lying for ſhips that draw much water.

Foure leagues ſouthweſt from Foy, lyeth the poynt of Dodman, and two leagues to the weſtwardes of it lyeth the haven of Falmouth. The poynt of the Dodman is double land vvith a round hill, which to the vveſtwardes goeth ſloping downe ſomewhat towardes the vveſt end ſtandeth a mill with a ſharp tower, and ſome litle houſes vpon the land, ſomewhat to the vveſtwards men may ſee the caſtle of Falmouth vpon a round Hommocke againſt the high land: this land is very good to know when you come from the weſt, or from the Lizart.

Dodman.

Vpon the vveſt poynt of the haven of Falmouth ſtandeth a Caſtle vppon the high land, and in the entry neereſt the vveſt ſide, lyeth a great rock aboue water, you may ſaile about it on both ſides, at the inner ſide of the eaſt point lye alſo ſome rockes off from the ſhoare. For to ſaile in there to the eaſtwardes, alongſt by the foreſayd rocke, you muſt runne in vvithin two cables lengths, alongſt by the eaſtland, leaving the foreſayd rockes on the ſtarboord ſide, and the great rocke on the larboord ſide, and ſo ſaile right in vvith the high land that lyeth on the vveſt ſide vvithin the haven. VVithin in the haven ſtandeth on the land a vvhite Chalkie ſpot, alſo a little vvood of trees, keepe them over the north poynt of the foreſayd high vveſt land, and ſaile ſo right in vvith them, keeping them ſo untill you come neere them, you ſhall finde ſo at halfe flood, vppon the ſhowldeſt, not leſſe water then fiue fathom, and that betwixt the foreſayd Caſtle upon the vveſt point, and the

Falmouth.

the eaſter caſtle that ſtandeth on the eaſt ſide, within the hauen, over againſt it, or a little within the Caſtles. When you ſhal then come by that foreſaide high weſtland, runne alongſt by it, unto the north ende of the ſame, & anckor there in twelue, thirteene or fourteen fathom. You may alſo from thence edge over towards the eaſt land, & anckor there vnder or behinde the bancke, that lyeth off from the eaſter Caſtle alongſt the middle of the haven, in ſixe, ſeven, or eight fathom; the banck falleth almoſt dry at low water, and is ſoft ground, ſo that the ſhippes ſit in the oaſe, when they come there aground.

For to ſaile in to the weſtwards of the foreſayd great rock, you muſt take the ſounding of the weſt land, where the Caſtle ſtandeth upon, in fiue or ſixe fathom, being ſomewhat within the rock, runne (as before is ſayd) towardes the weſt land. To the weſtwardes of the rock, it is in that channell ſixe and ſeven fathom deepe at halfe flood, but in the channell to the eaſtwards of the rock, ſeven and eight fathom.

Helford. Foure leagues ſouth and by weſt from Falmouth lyeth the eaſt poynt of the Lizart, betwixt them both lyeth a haven called Helford, which is little uſed of ſhippes. At the ſouth ſide of the haven lyeth a ſteepe poynt, and on the north ſide a low ſharpe poynt. Within the haven on the ſouth ſide, ſtandeth a Gentlemans houſe beneath at the ſtrand, and vpon the hill ſtandeth a tuffe of trees, you muſt keepe theſe one in the other, and runne ſo amiddeſt the chanell into the entry of the haven. On the north ſide ſtand alſo two or three trees, theſe come a maſts length to the weſtwardes of a little houſe that ſtandeth in a white ſandy bay, thereupon you may ſayle in alſo amidſt the chanell; it is a ſhort in-let, beeing come within, you may anckor in ſixe or ſeven fathom. Vpon the ſouth ſide ſtandeth alſo a ſharpe Tower, and vppon the north ſide a little Caſtle vppon the ſteepe land.

The Lizart hath three poynts, the northermoſt is called the Black-head, from that to the ſecond the coaſte lyeth ſouthweſt and by weſt, and alongſt to the third about weſtſouthweſt, or weſt and by ſouth: from the ſecond or middlemoſt poynt, lye to ſea-wardes ſome rocks a cables length, or a cables length and a halfe off, called the Staggs.

To the northwards of the northermoſt, or caſtermoſt poynt of the Lizart, betwixt Helford and the foreſayd poynt lye ſome rockes a great league off from the land, called the Mannacles Mannackles, ſouth and by eaſt from the harbrough of Falmouth, and eaſtnortheaſt from the foreſayd Blacke-head, whereof many of them are aboue water at low water, and ſome of them at high water remaine vncovered. Betwixt them and the ſhoare it is very fowle and rocky, ſo that men cannot run through betwixt them without great danger.

Hee that commeth out of Falmouth, and is bound to the weſtwardes, muſt not goe more ſoutherly with an ebbe then ſouthſouthеaſt, or ſoutheaſt and by ſouth, according as the winde ſhall be, for to runne cleare of theſe foreſayd rockes.

Of the tydes and courſe of the ſtreames.

IN Plymmouth and Foy a weſt and by ſouth, and eaſt and by north Moone maketh the higheſt water.

Thwart of Foy in the channell an eaſtſouthеaſt Moone.

A ſea-boord of Falmouth an eaſt and by ſouth, but in the haven of Falmouth an eaſt and by north Moone.

At Helford and at the Lizart, by the land, an eaſtſoutheaſt and weſtnorthweſt Moone maketh the higheſt water.

From the Rame head to the Steart by the land, within the Eddy-ſtone, the flood falleth eaſtſoutheaſt, and the ebbe weſtnorthweſt.

From the Dodman to Ramehead the flood falleth eaſtnortheaſt, and the ebbe weſtſouthweſt.

From the Lizart to the Dodman northeaſt and ſouthweſt.

In the channell betwixt the Lizart and the Steart, thwart of Foy the Flood falleth eaſt and by north, and the ebbe weſt and by ſouth.

Of the depths.

VVHen you haue the high land of Plymmouth north from you, you may ſee it in fiftie fathom, it is high double land, and ſheweth it ſelfe firſt in two hilles. That ſame high double land within the land, you may ſee it from thwart of Foy vntill you come thwart of Dartmouth.

The Dodman you may ſee in 42 fathom off from the Lizart to the Steart.

The Lizart you may ſee in fiue and fiftie fathom, there the ground is white and red ſhelly ſand.

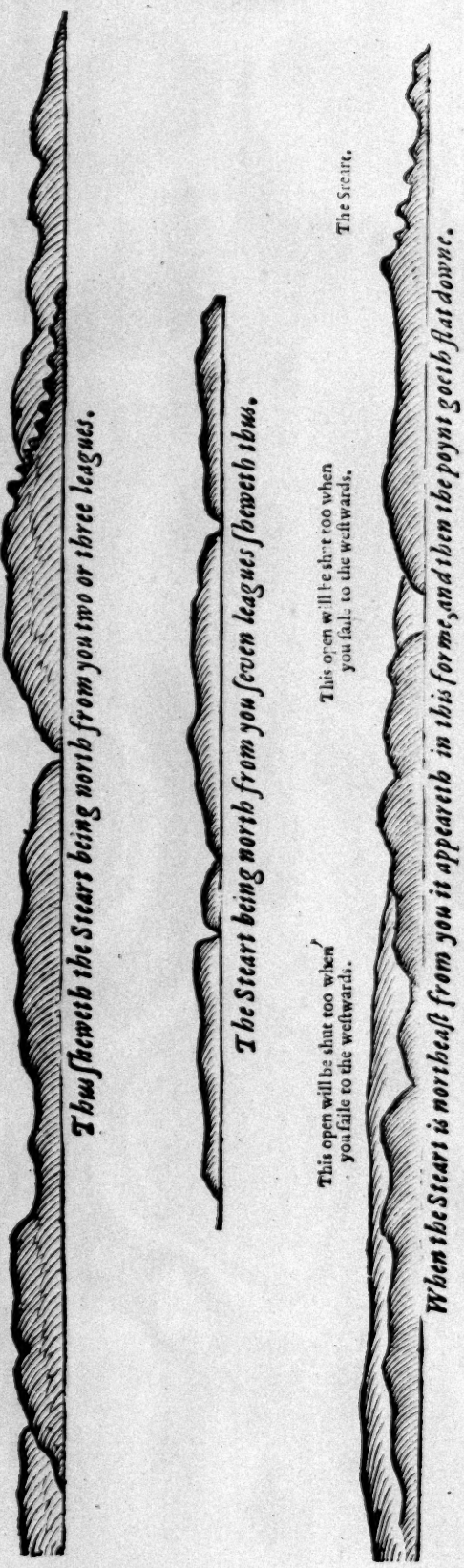
Courſes and Diſtances.

FRom the Steart to the Rame head, the courſe is weſtnorthweſt 8 leagues.
From Rame head to the Iland of Lowe weſt-

weſtſouthweſt 5 leagues.
From the Ile of Low to Foy, weſt 2 leagues.
From Foy to the Dodman ſouthweſt 4 leagues.
From the Dodman to Falmouth weſt and by ſouth, and weſtſouthweſt 4 leagues.
From Falmouth to the Lizart ſouth and by weſt 4 leagues.
From the Steart to the Eddy-ſtone weſt or a little more northerly. 7 or 8 leagues.
From the Eddy-ſtone to the Ramehead north a litle weſterly 3 leagues.
From the Ramehead to the Dodman weſtſouthweſt 8 leagues.
From the Dodman to the Lizart ſouthweſt 7 leagues.
From the Steart to the Lizart weſt and by ſouth 20 or 21 leagues.
From the Lizart to Garnſey eaſt and by ſouth 37 leagues.
From the Lizart to the Sept Iles, or ſeven Ilands the courſe is ſoutheaſt and by eaſt 27 leagues.
From the Lizart to Vſhant ſouth 29 leagues.
From the Lizart to C. de Finiſterre ſouthſouthweſt 153 leagues.
And that courſe goeth about 5 leagues without the cape.
From the Lizart to Teneriffe ſouthſouthweſt 466 leagues
From the Lizart to Tercera ſouthweſt and by weſt 386 leagues.

Heights.

The Lizart lyeth in 50 degrees.



How theſe lands doe ſhewe themſelues at ſea.

Thus ſheweth the Steart being north from you two or three leagues.

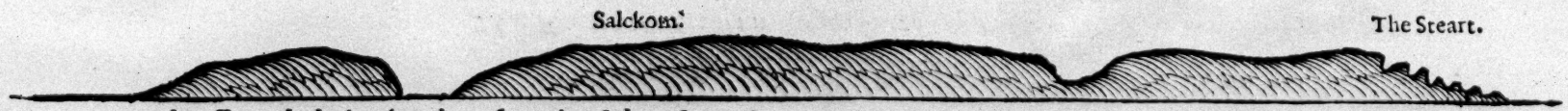
The Steart being north from you ſeven leagues ſheweth thus.

This open will be ſhut too when you ſaile to the weſtwards.

This open will be ſhut too when you ſaile to the weſtwards.

When the Steart is northeaſt from you it appeareth in this forme, and then the poynt goeth flat downe.

Thus



Thus ſheweth the land to the weſtwards of the eaſtermoſt poynt of the Steart towards Salcom when you ſaile alongſt by it.

Thus ſheweth the land of the Steart, and alongſt to the weſtwards of Plymmouth, when the Steart is northnortheaſt about two leagues, and the Sound of Plymmouth northnorthweſt fiue or ſixe leagues from you.

The land betwixt the Steart and the Sound of Plymmouth ſheweth it ſelfe in this forme when you ſaile alongſt by it.

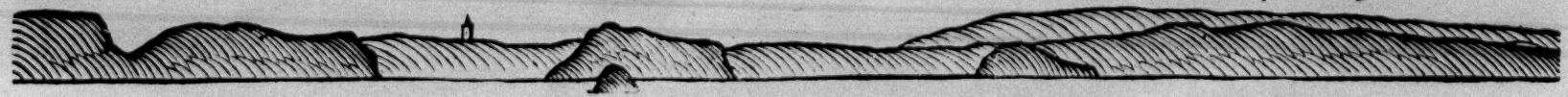
Thus ſheweth the high land to the eaſtwards of Plymmouth.

Thus ſheweth the land of Ramehead, and to the northwards of it, when you ſaile into the Sound of Plymmouth.

The Dodman. The Ramehead.

When you are thwart of the Dodman foure leagues without the land, th at and the land to the eaſtwards of it, vnto the Ramehead, ſheweth it ſelfe in this manner.

The Dodman when you are right before it



Thus ſheweth the land to the eaſtwards of Falmouth when you ſaile alongſt by it, a league a ſeaboord the land.

Lizart. Falmouth. Dodman.

Thus ſheweth the land between the Dodman and the Lizart.

Lizart. Helford. Falmouth.

The land betwixt Falmouth and the Lizart ſheweth thus when you are before Falmouth.

Thus ſheweth the Lizart when you ſaile alongſt by it.

De Engelsche Cust van Lezart af tot de C. de Cornuval en d'Eylanden van de Sorlinges

Sorlinges

Sevensteen

De Wolf

I. Brys

14 15 25

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng: en Fr: mylen 20 in een graedt

C. de Cornwal

Whitland Bay

CORNWAL

Perfsans

Fort Curdo

Engelands eynd

't Lustin

Lamorrijs point

Mousthole

Mont S. Michiel

Monts Bay

Hilsoort

Helston

Curry

Predanner point

Lezard

71

CHAP. VIII.

The coastes of England from the Lizart and the Lands end of England, vnto the Cape of Cornvvall and Sillye.

The Lizart

THE Lizart is a low poynt, where some rockes lye off from it, vpon the south end standeth a Tower, and vpon the high land towardes the north end standeth another tower which is sharpe.

Mounts-Bay

About fiue leagues northwest from the Lizart, lyeth a great Baye, called Mounts-Bay, at the west poynt of that Bay lyeth a litle Iland, vvhereupon stand two litle short towers like beacons, at the east side in the baye lyeth another high litle Iland, whereupon standeth a Castle, called S. Michiels Mount. At the east side of this Baye, lyeth a great rane of rockes, vvhich lye off into sea a league from the land, vvhereof men must take good heed in dark weather; from thence to the southward towards the Lizart, the coast is all alongst full of rocks, but these lye not so farre off from the shore.

S. Michiels Mount.

For to saile into Mounts-Bay, comming from the Lands end, or from the Lizart, and being to the vvestwardes of the foresayd rane of rockes, you must runne in right with the litle Iland called S. Michiels Mount, so long vntill you come vvithin a halfe league of it, then edge up to the vvestwardes towardes the Bay, untill that you see that foresayd litle Iland, vvith the two litle short towers at the vvest poynt, leaue it on the larboord side, and runne in close alongst to the northwards of it, for it is very cleane, but leaue the Castle a great vvayes on the starboord side, being fowle about it. Being come vvithin the litle Iland at the west poynt, you shall see vvithin it a great sandy baye, anckor there in seven or eight fathom. Eastsoutheast and southeast winds doe blow there right open in, for all other winds you lye there land-lockt.

Lands end of England.

Foure leagues to the vvestwards of Mounts-Baye lyeth the Lands end of England, and lyeth from the Lizart westnorthwest distant nine or ten leagues. About a league southeast from the Lands end, a halfe league vvithout the land, lyeth a suncken rock, which at low water cometh even aboue vvater. Thwart of that rock standeth a Church vpon the land, vvhen you can but euen see that, over the high land, then are you thwart of the foresayd rock, to wit even as farre from the land as the rock, but when the Church is hidden behind the high land, that you cannot see it, then are you neerer to the land then the rock, or within the rock towardes the land, and so you shall goe through betwixt it and the land.

Vpon the Lands end of England lye two round hilles, vvhen you get sight of them, you shall see upon the highest a spire tower, comming somewhat neerer, you shall see vpon the outermost end in the low land, another spire tower, thereby is the Lands end reasonable well to bee knowne. The ground is thereabouts vvhitish sand, vvith red sand, and mingled with shelles.

From the Lands end unto the C. of Cornewall, or to the litle Iland Bresam, lyeth the coast most north about fiue leagues.

Rocks at the Lands end.

At the Lands end lye some rockes, you may runne in vvithin them as well to the northwards as to the southwards, and come to ankor in eight or nine fathom: to come in there from the southwardes it is narrowest, and tenne fathom deepe: from the northwardes it is best and broadest, and eight and nine fathom deepe; but on the left side close to the north poynt of the Lands end lyeth a suncken rocke, vvhich you must avoyd vvhen you saile in there.

Silly lyeth from the Landes end vvestsouthwest distant eight leagues, but from the Lizart west, sixteen or seventeen leagues.

Seven stones.

Betweene the Lands end and Silly lye the Seven-stones vvestsouthwest, and vvest and by south foure leagues from the Landes end, and northeast and by east, and eastnortheast, almost three leagues from Silly, that is, a rane of rocks vvhich come not aboue vvater, but alwayes breaketh upon them.

The Gulfe.

Southsouthwest and southwest and by south three or foure leagues from the Landes end, and fiue leagues east from Silly, lyeth also a sharpe rock called the Gulfe, vvhich commeth at halfe tyde aboue water, and is round about indifferent cleane.

For to saile into Silly.

Sillye is divided into divers Ilands, alongst the west side lyeth a great multitude of rocks, men may goe in there through divers chanels or sounds, but the souther channell is the best. About the middest of the entry of that sound or chanell, lyeth a suncken rock, men may goe in on both sides of it, but to the eastwards of it is broadest and best. For to saile in there coming from the east, you must runne alongst by the east land in eight or nine fathom, and you shal so runne alongst to the eastwards of the foresayd suncken rock, vvhich lyeth against a sconce a litle without the Castle. The markes to avoyd this rock, are two rocks which lye on the west side within the haven, the one (to wit the innermost) is somewhat greater then the other. If you bring them one in the other, or the northermost a litle to the eastward of the southermost or the smallest, so that you may even see through betweene them, and saile so right in, keeping them so, you shall so saile farre enough to the eastwards of the rock. If you come from the southwards or the vvest-

wards, and are bound into Sillye, then run towards the eaſtland ſo long untill you bring the two foreſayd rocks within the haven, one in the other, or even through one another, ſaile then ſo in, and then you ſhall runne (as before is ſayd) cleare of the foreſaid ſuncken rock, thwart of the ſconce. At the inner point of the Iland, at the eaſt ſide of this ſouther chanell, lyeth another ſunken rock, whereof men muſt take heed. For to avoid it, you muſt run ſo long to the northwards, vpon the markes of the foreſayd two rockes, untill you may ſee the litle tower in the ſandy Baye, then goe to the eaſtwards, vnto the Bay, and ankor there in eight or nine fathom. When you come nere Sillye vpon the ſouth ſide, you ſhall ſee a ſquare tower in the ſandy bay or valley, and to the weſtwards many litle Ilands and rockes. The ground of Silly is ſomwhat ſtony with ſome red ſhells.

Of the tydes, and courſe of the ſtreames.

IN Mounts Bay, and at the Lands end of England, a weſtſouthweſt and eaſtnortheaſt moon maketh high water.

In Silly a ſouthweſt and by weſt Moone maketh full ſea.

A Seaboord of Silly in the channell likewiſe a ſouthweſt and by weſt Moone.

In the entring of the chanell a ſouthweſt and northeaſt Moone.

From Sillye to the Lizart the flood falleth northeaſt, and the ebbe ſouthweſt.

In what depths men may ſee theſe lands.

SIlly men may ſee on the ſouth ſide in 52 fathom, and the ground there is ſtony, with ſome red ſhels.

The lands end of England men may ſee alſo in 52 fathom.

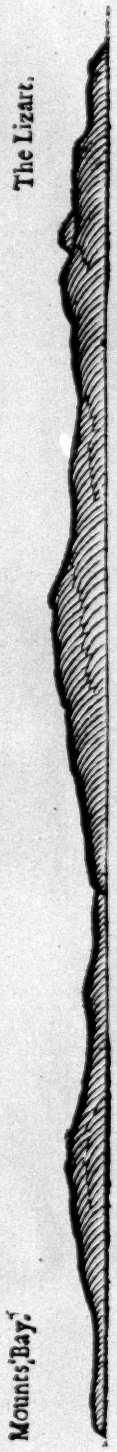
Courſes and Diſtances.

FRom the Lizart to the Lands end weſtnorthweſt 9 or 10 leagues.
From the Lands end to Silly w.ſ.w. 8 leagues
From the Lizart to the Gulfe the courſe is weſt and by north 10 leagues.
From the Lands end to the Gulfe the courſe is ſouthſouthweſt 3 leagues.
From the Gulfe to Silly weſt 5 leagues.

FRom Silly to the Caskets eaſt ſomewhat ſoutherly. 56 leagues.
From Silly to Vſhant the courſe is ſoutheaſt and by ſouth 37 leagues.
From Silly to C. de Finiſterre, ſouth & by weſt weſterly 150 leagues.
From Silly to C. Cleare in Ireland northweſt and by north 40 leagues.
From Silly to Waterfoord north ſomwhat weſterly. 40 leagues.

Heights.

The ſouth ſide of Silly lyeth in 50 degrees, or a litle more.



Thus

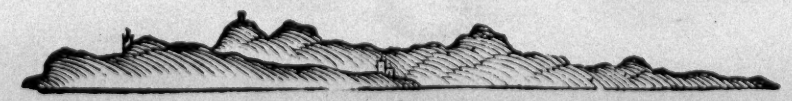
Thus ſheweth the land betwixt the Lizart and the Lands end, when the Lizart lyeth about eaſt and by north, and Mounts Bay north from you.

Lands end n.n.w.

Mounts Bay n.e. by n. and n.n.e.

Thus ſheweth the Lands end, and the land to the eaſtwards of it, when it is northnorthweſt, and Mounts Bay is northeaſt and by north and northnortheaſt from you, being a league from the land.

The lands end ſheweth it ſelfe thus, when you come in right with it out of the ſea.



The lands end being eaſt from you, ſheweth thus.

East.

The Lands end of England.

Thus ſheweth the lands end of England when it lyeth ſouth eaſt and by ſouth ſeven or eight leagues from you, and the round hill to the northwards of it eaſt, then you may even ſee the low land betwixt them both.

Thus

Thus sheweth Silly being eastnortheast from you

When Silly is southeast from you it sheweth thus.

When Silly is east five or sixe leagues from you, it sheweth thus.

When Silly is southeast and by east from you, it sheweth thus.

Silly being southwest from you, sheweth thus.

Of the depths and many ſorts of groundes before and in the channell betweene Silly and Vſhant, and thereabouts.

Seames. SOuthweſt and by ſouth from the Seames ſeven leagues it is deepe ſeventy two fathom, the ground pale white courſe ſand, like ſmall fretted litle ſtones, with litle peeces of queenes and ſhelles with gray flat litle ſtones, and white gliſtering needles, ſaile from thence north and north and by eaſt, and then you ſhall fall well to paſſe with Vſhant.

About two leagues ſouthweſt from the Seams it is deepe 52 fathom, the ground there is white, yellow, rough, and ſomvvhat longiſh ſand, vvith a little red ſmall ſhelly ſand, vvith many gray crompled things, and ſome ſmall vvhite gliſtering points of needles. If men did finde there 70 or 80 fathom, they vvould judge it to bee good channell ground.

Seames. Weſtſouthweſt from the Seams, ſo farre from the land, as men may but even ſee the Sheetes from the poop, vvith cleare ſight, it is 54 fathom deep; the ground is red, yellow, vvhite and black peeces, like parings of cheeſe, and a litle courſe red ſand mingled vvithall.

Seames. Weſt and by ſouth eight or nine leagues from the Seams, in 65 fathom, the ground is white yellow, vvith a litle red ſmall ſhelly ſand, vvith ſome peeces of ſhells and queens not very great, vvith much vvhite and yellow ſomething long ſand, and ſmall vvhite things like points of needles, like as men finde in the channell.

Vſhant. Seven leagues ſouthweſt from Vſhant, or thereabouts, that men may even ſee it from the poop, having clear ſight in 70 fathom, there the ground is vvhite and yellow courſe ſand, vvith ſome peeces of queenes ſhelles, and ſome peeces of vvhite thin ſhells, vvith ſome gray flat ragged ſtones.

Vſhant. Southweſt and by vveſt from Vſhant, about 19 or 20 leagues, in 78 or 80 fathom, the ground is vvhite and yellow courſe ſand, with ſmall gliſtering needles, vvith vvhite peeces of queenes ſhels, and gray and yellow flat ſtones, and litle peeces, like as it vvere of Oyſter ſhelles.

Vſhant. Weſt and by ſouth from Vſhant 21 leagues, in 68 fathom, the ground is red, yellow, and black, mingled vvith a litle vvhite round ſmall ſand, like ſhelly ſand. But in 80 fathom, 21 leagues vveſt & by ſouth off from Vſhant, the ground is yellow and ſhelly, vvith ſome gray and crompled litle needles, like ends of ſmall rye.

Vſhant. In eighty fathom 24 leagues from Vſhant weſt and by ſouth, men finde rough, great ſand, vvith many ſorts of ſhelles red, vvhite, yellow, and gray, vvith peeces of queene ſhells.

From Vſhant vveſt 16 or 17 leagues, in 75 fathom, the ground is vvhite and yellow courſe ſand, vvith peeces of thinne vvhite ſhelles, and gray peeces of queenes ſhells, like as it were of Oyſter ſhelles, vvith ſmall vvhite gliſtering things like needles.

Vſhant. Eight or nine leagues from Vſhant it is deepe 70 fathom, the ground red, vvhite, yellow, and gray ſhelly ſand, with red, yellow, and black peeces of ſhelles, and ſmall red, yellow, black, and gray ſtones, vvith ſome ſmall white things like needles.

Eight and fortie leagues weſt and by north from Vſhant, & 50 leagues weſtſouthweſt from the Lizart, or thereabouts, it is deepe 95 fathom, the ground, red, yellow, and black ſand, with ſmal white round ſhelly ſand, and ſome litle peeces of ſhelles, and queen ſhels, with ſome peeces of thin ſhels.

Three and thirtie leagues vveſt and by north from Vſhant, and 27 leagues ſouthweſt and by ſouth from Silly, in 95 fathom, the ground is gray, red and yellow, mingled with ſmall black ſands, vvith darke, red, white, and yellow peeces of ſhels, to wit, gray and red ſhellie ſand. An eaſt-northeaſt courſe from this ground off, is the beſt, it is in the height of about 49 degrees.

Vſhant. Foure and twentie leagues weſt, or weſt and by north from Vſhant, and ſouth and by vveſt from Sily 21 leagues, in 80 fathom, there the ground is vvhite, gray, red and yellow, fine ſmall ſhellie ſand, vvith litle red and white peeces of litle ſhels, to ſee to like bruiſed muſtard ſeed in the height of 49 degrees.

Vſhant. Seven or eight leagues weſt and vveſt and by north from Vſhant in 68 or 70 fathom, there the ground is white and yellow, ſmall ſhelly ſand, mingled with many gray crompled litle things, like needles.

Vſhant. About 30 leagues ſomewhat more northerly from Vſhant, in 90 fathom, the ground is ſmall white rough, and ſomewhat long ſand, mingled with a litle red and yellow, and ſome gliſtering litle things like needles, vvith two or three peeces of vvhite gray ſhels. If you goe on from thence northeaſt and by north, untill you come in 55 fathom, there the ground is yellowiſh white courſe ſhelly ſand, vvith white peeces of ſhels; then you may ſee Silly lye nine or tenne leagues north or ſomewhat more vveſterly from you.

Vſhant. Lizart. Weſtnorthweſt from Vſhant 21 leagues, and ſouthweſt and by ſouth from the Lizart 27 leagues, in 80 fathom, the groud is gray and red ſhelly ſand, there commeth alſo on the lead, a litle peece or two of white or gray queene ſhels, with yellow and red peeces of ſhels, alſo peeces of perriwinckles..

Nine leagues northweſt and by north from Vſhant, the ground is white and yelow rough ſhelly ſand, with gray crompled gliſtering litle things like needles, there come alſo on the lead, litle things like ſmall ſtrawes. If you goe on n.e. from thence, you ſhall fall with the Stearr.

Vſhant. Twenty leagues northweſt and by north from Vſhant, and 16 leagues ſouthweſt ſomwhat ſoutherly from the Lizart in 68 fathom, the ground is white yellow and red ſmall round ſand, with ſome white gliſtering little things like needles, with one or two little gray crompled things like needles, and two or three little peeces of little white ſhels.

Vſhant, Lizart. Nineteene leagues n. n. w. from Uſhant, and 12 or 13 leagues ſ.ſ.w. from the Lizart, it is 68 fathom deepe, the ground is there all manner of ragged ſtones, gray, red and black, with red peeces of ſhels, and ſome gray crompled litle things like needles.

Vſhant. Nineteen leagues north and by weſt from Vſhant, and ſouth from the Lizart, it is deepe ſixtie two fathom, the ground is white and courſe ſhelly ſand, with white & gray crompled litle things, like needles vvith white peeces of ſhels, and two or three litle ſtones among.

Silly. Twelue or thirteene leagues weſt from Silly, or ſomewhat more northerly, it is deep ſixtie fathom, the ground is gray and oaſie, mingled with ſmal black ſand. In ſome places of the ſame depth it is white gray, oaſie ſmall ſand, vvith peeces of thin white ſhels amongſt, with a little peece or two like parings of cheeſe: this ground cannot be gotten up with candle tallow, or other hard tallow upon the lead, but with ſoft tallow, or butter. In theſe depths you haue no where ſuch oaſie ground as there, whereby men may well know that they are on the back ſide of Silly or England, to wit, weſt from Silly.

Silly. Weſt from Silly 7 leagues, it is oaſie gray ſand with two or three little peeces like parings of cheeſe.

Seven or eight leagues ſouthſouthweſt from the Lizart, in ſixtie fathom, the ground is white groſſe with a little red ſand, with litle ſhels, and litle gliſtering white things like needles.

Nine or ten leagues ſouth and by weſt from the Lizart, in 60 fathom, the ground is yellow peeces of ſhels, and gray peeces of ſoft flat ſtones like parings of cheeſe, with ſome red peeces of ſhels, without any ſand therein.

Lizart. Silly. Southweſt and by weſt from the Lizart, and ſ.ſ.w. from Silly 19 leagues, it is deep 78 fathom, the ground gray yellow & red ſhelly ſand, with redde yellow and blew peeces of ſhels, with queene ſhels, and a peece or two like parings of cheeſe, or like peeces of Oyſter ſhels, with alſo two or three gliſtering litle things like needles, in the height of about 49 degrees & 30 minutes.

Steart. Fifteene or 16 leagues ſouthweſt and by ſouth from the Steart, in 57 or 58 fathom, the ground is peeces of all maner of ſhels, and queen ſhels, with a litle yellow and white ſhelly ſand, with many ſorts of little ſtones, and gray litle peeces, like parings of cheeſe, with ſome crompeld, and ſome not crompeld, but litle gliſtering things like needles, and litle things like maggots that are in bakon.

Steart. Southſouthweſt from the Steart 16 leagues, in 53 fathom, the ground is white reddiſh ſhelly ſand, vvith peeces of queen ſhels, with red, gray litle ſtones.

Southweſt from the Steart eight leagues, it is deep forty fathom, the ground gray and red ſhelly ſand.

Southſouthweſt from the Steart thirteene or foureteene leagues, it is deepe 47 fathom, the ground pale muddy ſand, with litle long things, and litle ſtones.

A great kenning ſ.ſ.e. from the Steart, it is deep forty fathom, the ground red ſandy clay with pits in the tallow.

Steart. Southweſt eleven or thirteen leagues from the Steart, in 50 fathom, the ground is white & yellow ſmal ſhelly ſand, with ſome peeces of white ſhels, with gray and crompeld, and alſo gliſtering litle things like needles. In fine, hee that ſoundeth much, getteth many & divers ſorts of grounds, and ſometimes great change in little change of diſtance of place. But he that ſoundeth and findeth white ſhels, with litle things like ſtrawes and needles, it is certaine that he is neereſt to Vſhant: but if he find brandy ground, or black litle ſtones mingled with white litle things then is he neereſt to Silly.

Marks of Vſhant & Silly. Hee that ſoundeth thwart of Vſhant, and findeth ſmal white ſand, and litle ſhels, and ſmal litle things oaſie and white. Vſhant ſhal then lye northeaſt from him. If he finde long ſmal little things like needles, then ſhal Vſhant lye ſoutheaſt from him. But if he be not ſure of theſe grounds, then he ſhal beare to the northwards: and if hee find deeper water, then he is towards the Seams, but if he finde it ſhowlder, then he is in the entring of the chanel to the northwards of Vſhant. If he be between Vſhant and the Seams in 70 fathom, he ſhal finde the ground to be ſmal little ſtones like black ſand of the earth: or els if hee finde the ground to bee great red ſand, then hee muſt ſtand to the northwards vntil that he finde the white ſandy ground, and long ſmall things, then he may hold himſelfe certaine to be in the entring of the channel.

The

Duytſche mylen 15 in een graedt

Spaenſche mylen 17½ in een graedt

Eng: en Fr mylen 20 in een graedt

De Cuſten van Engelandt tuſſchē C. Coꝛnwal en het eylandt Londey

Sorlinges

Zevensteen

I. Breſan

C. Cornual

S. Ives

S. Burien

S. Ives Bay

Engelands eynd

C O R

de Bußchop met
syn clereken

I Ramsey

I Gresholme

Brede
Bay

I Scaline

I Stocholme

Wulfford haven

S. Gowens point

de Crau

40

45

30

Lunden

Hartlandt point

Bedisford

Stratton

Hoodshaven

Stoupert point

32

Padstou

R N W A L

72

Dresam.

S. Yues.

Stoupert.

Padstow.

Harland
point.

CHAP. IX.

The Coaſtes of England betvvixt the Cape of Cornvvall and the Iland Londey.

FRom the Lands end of England to the C. of Cornwall, the coaſt lyeth north about fiue leagues, but Silly & the foreſayd Cape lye ſouthweſt and northeaſt diſtant about nine leagues. By the Cape lieth a little Iland or rock called Breſam, betwixt it and the Cape men may ſaile through.

Breſam.

From the C. of Cornwall unto the litle town S. Yues, lyeth the coaſt about eaſt and by north, and e.n.e. 5 or 6 leagues. S. Yues lyeth vpon the weſt poynt of a great Bay, which is about two leagues broad. At the eaſt poynt of the Bay lyeth a little Iland, there lyeth off from it a great ledge of rocks a great halfe league thwart off into ſea, whereof many of them come at halfe ebbe aboue water, therefore he that commeth off from the Cape of Corenwall, and will ſaile alongſt the coaſt towards Stoupert or Padſtow, muſt keepe off (thwart of this ledge) at leaſt a great league from the ſhore, becauſe of the foreſayd rockes. Betwixt that foreſayd litle Iland at the eaſt poynt of the Bay, and the maine land, it is alſo at many places rocky and fowle, ſo that one that is not there very well acquainted, may not ſayle through there without great danger. In the Bay of Saint Yues is on both ſides good ſandy ground, where men may ankor all over, & come ſo neere the ſhores as they will. At the weſt ſide of the Bay at the Towne, is a head where ſmall ſhips and barkes do goe in within it, and lye there ſuccoured for northerly winds, but great ſhippes may not do ſo, they muſt anckor without in ſixe or ſeven fathom.

S. Yues.

From S. Yues to Hartland poynt, the courſe is northeaſt 17 or 18 leagues, betwixt them both about halfe wayes lyeth the point of Stoupert, to the eaſtwards of it lyeth Padſtow in a bay where is a very good road in 7 or 8 fathom. At the weſt ſide of that poynt lyeth a ſuncken rock under water, and vpon the poynt, a great high rock, to the weſtwards of that poynt towardes S. Yues, are many white ſandy, and chalky bayes alongſt the ſhore, thereby the coaſt there is very good to be known.

Stoupert.
Padſtow.

Hartland point is a point that lies out, 4 leagues north from it lyeth the Iland Londey, which is ſomewhat a long Iland, it lyeth moſt north & by weſt, and ſouth & by eaſt. At the eaſt ſide of that Iland men may ride for weſterly winds in 14 and 15 fathom, but on the weſt ſide the ground is fowle.

Hartland poynt.

Of the tydes, and courſe of the ſtreames.

BEtwixt Silly and Londey the flood falleth northeaſt, and the ebbe ſouthweſt.

In Silly a ſouthweſt and by weſt moone maketh high water.

On the coaſt of England betwixt the Cape of Cornwall and Hartland poynt a weſtſouthweſt, and weſt & by ſouth moon maketh high water.

Thwart of the Iland Londey a weſt & by ſouth, but on the Iland, an eaſt and weſt moone.

Of the depths, grounds, and markes for to know the land.

SIlly may be ſeen on the north ſide in 45. 46. & 48 fathom, there the ground is oaſie, with ſome litle ſtones amongſt it.

When men are to the northwards of Silly, it ſheweth firſt in two Ilands, upon the eaſtermoſt they ſhall ſee a tower, or litle caſtle, to the eaſtwards of the two Ilands, they ſhall ſee alſo two great hilly rockes, and to the weſtwardes three high black rockes.

Weſtnorthweſt and weſt and by north ten or eleven leagues from Silly the ground is oaſie & ſoft that men can ſcarce get any of it upon the lead, there come ſome litle ſhells amongſt it.

Betwixt the Lands end of England and Londey, in the fareway, it is 45 fathom deepe, the land of Cornwall men may ſee in 44 fathom.

Three or foure leagues without the land, thwart of Saint Yues, Stoupert, or Padſtow the ground is ſharpe and rocky, but neerer the land it is all ſandy ground.

Betwixt S. Yues and Hartlands poynt are many white chalky hills alongſt the coaſt, eſpecially neere by Stoupert or Padſtow, whereby this coaſt is to be knowne.

Courſes and Diſtances.

FRom Silly to the C. of Cornewall northeaſt — — — 9 leagues.
From the C. of Cornwall to S. Yues eaſt and by north. — — 7 leagues.
From S. Yues to Stoupert poynt, northeaſt and by eaſt — — 9 leagues.
From Stoupert to Hartland poynt northeaſt and by north — 9 leagues.
From S. Yues to Hartland point n.e. 18 leagues.
From Hartland point to the Iland Londey north — — 4 leagues.
From the C. of Cornwall to Londey northeaſt and northeaſt and by north 27 leagues.
From the C. of Cornwall to Milford in Wales northnortheaſt 32 or 33 leagues.
From Silly to Milford northnortheaſt ſomwhat eaſterly 40 leagues.
From the cape of Cornwall to the rock Tuſkar north and by weſt 40 leagues.
From the cape of Cornwal to Waterford n.n.w. But from Silly north and by weſt ſomewhat northerly, 40 leagues.
From Silly to C. Cleare in Ireland northweſt and by north 40 leagues.

Heights.

THe C. of Cornwall lyeth in 50 degr. 25 min.
Londey lieth in — 51 degr. 20 min.

How these lands doe shew themselues at sea.

Thus sheweth the land betwixt the lands end of England, and the C. of Cornwall or the Iland Bresam, when you are on the back side of the Lands end.

Thus sheweth the C. of Cornwall, when it is east and by south from you, so farre that you may but even see it from the poop.

Thus sheweth the land betwixt the C. of Cornwall and S. Ives, when it is about foure leagues from you.

Thus sheweth the land when you are before or thwart of S. Ives, about fine leagues without the land.

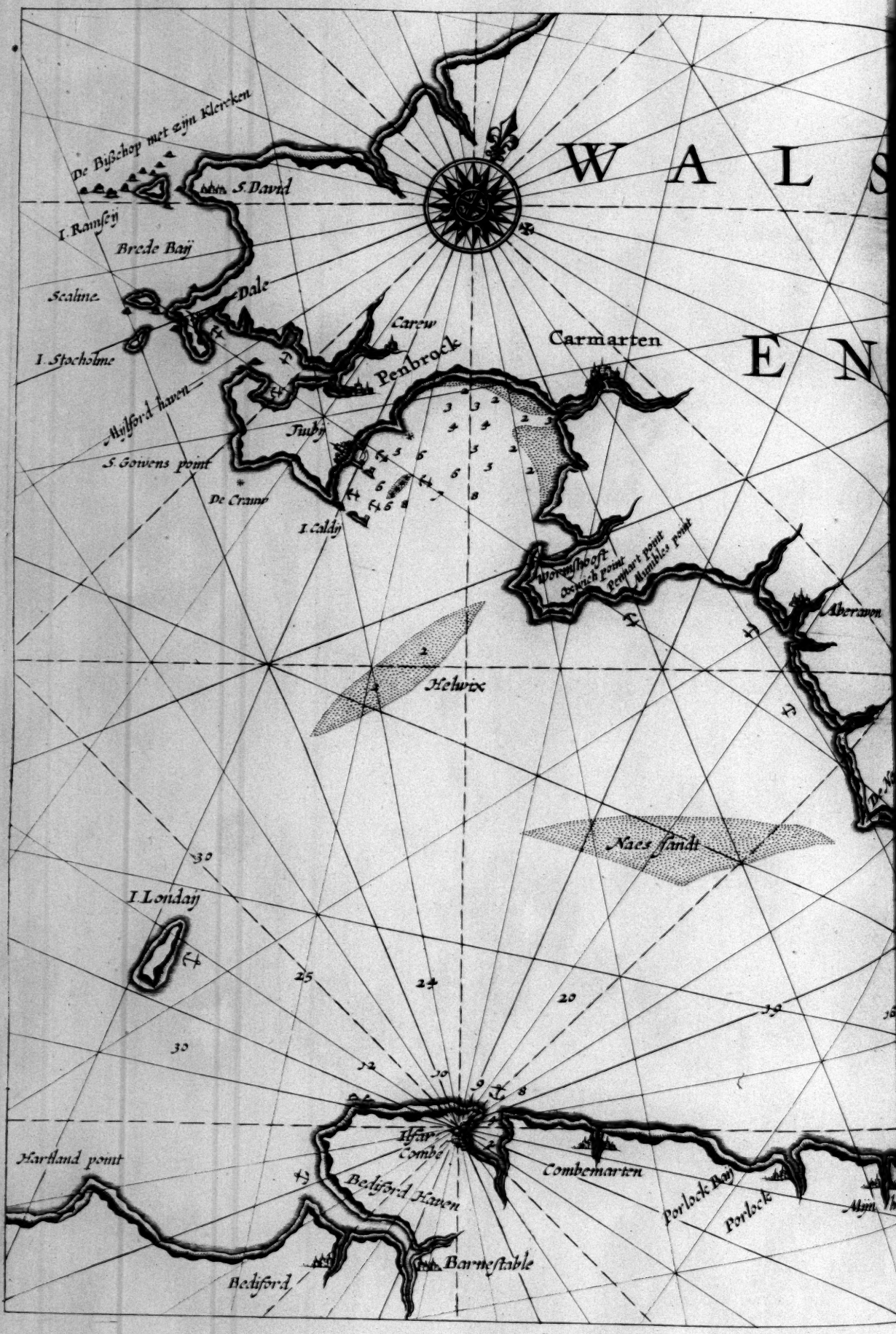
To the westwards of Stoupert sheweth the land thus, when you saile alongst by it 2 or 3 leagues without the land.

The land to the eastwards of Padstow or Stoupert sheweth thus, when it is 2 or 3 leagues east and by south from you.

The land of Stoupert or Padstow sheweth thus, when you saile alongst by it 3 or 4 leagues without the land.

When the Iland Londey is north from you, it sheweth thus.

When the Iland Londey is n.n.w. from you, it sheweth in this forme.


De Bysschop met zijn Klercken
S. David
I. Ramsey
Brede Baij
Scaline
Dale
I. Stocholme
Milford haven
S. Gowens point
De Craune
Tuby
Carew
Penbrock
Carmarten
I. Caldy
Worgyshoft
Oxwich point
Penmart point
Mumbles point
Aberawn
Helwix
Naes sandt
I. Londay
30
25
24
20
Hartland point
Ilfar Combe
Bediford Haven
Combemarten
Porlock Baij
Porlock
Barnestable
Bediford

1 2 3 4 5 6 7 8

Duijtſche mijlen 15 in een graedt

1 2 3 4 5 6 7 8 9 10

Spaenſche mijlen 17½ in een graedt

1 2 3 4 5 6 7 8 9 10 11

Eng: en Fr: mijle 20 in een graedt

T'Canael van Briſtou met de Zuijd-Cuſt van Wals engelandt.

N

E

A N T.

Neuport

Cardief

I. Denny

Barreij I.

I. Silie

Engelſche gronden

Pylis of Portshut point

Kings rede

Briſtou

Vplithaven

Dunſter

Hundſpil

73

CHAP. X.

The Channell of Bristow, with the Coaste of VVales.

FOure leagues to the eastwardes of Hartland poynt eastsoutheast from the south end of Londey, lyeth the sound of Biddeford, beeing a bard haven, where many shippes doe saile in and out. A litle within the mouth of the haven, it divideth it selfe into two rivers, upon the westermost on the starbord side lyeth Biddeford, and upon the eastermost on the larbord side, lyeth a towne called Barnestable.

Biddeford.

Barnstable

From the poynt to the northwards of Biddeford haven, unto Ilfercombe the course is e.n.e. foure leagues, that is a haven where remaineth at low water 3 or 4 fathom depth. Before the haven is also good road, in 8 or 9 fathom at halfe flood.

Ilfercomb

Eleven or 12 leagues to the eastwards of Ilfercoomb, lye two litle Ilands, about two leagues north and south one from the other, called the Holmes, the northermost is called the Flatholm, and the southermost the Steepholm, betwixt Ilfercomb and the Holmes (somwhat neerer the Holmes then Ilfercomb, lieth a litle town called Mynehead, where many ships do lade.

Flatholme

Steepholm

In the fareway betwixt Ilfercoomb and the Holmes, on the English side, on the one side, and the bankes on the Welsh side on the other side, in the middest of the channel it is deepe 30, 25, 20, 18, 16 and 15 fathom, the neerer the Holmes the showlder water. When men come from the vvestwardes within the Iland Londey, then they may see the land on both sides, to wit, of England and Wales. The English coast even from the C. of Cornwall, to the Holmes, is altogether cleane, but the coast of Wales is most all fowle and showld, from the Iland Caldy unto Bristow, vvith many bankes, sands, and riffes that lye off. The Holmes and the Iland Londey lye westsouthwest and eastnortheast distant nineteen leagues.

He that wil saile from Londey to Bristow, must run alongst by the English coast, untill that hee come within the point of the Naes, for to avoyd Naes-sand, and then forth alongst through betweene the Holmes, leaving the Steepholme on starbord, and the Flatholme on the larbord side. Men may also with litle ships, of litle draughts, saile about to the southwards of the Steepholm, but it is there so showld, that there remaineth at low water no more then two fathom water. Vnder Steepholm men may anckor where they wil in 4 or 5 fathom.

Road under Steepholme.

He that cometh off from the Naes, and is bound to Bristow, must stand over to the Steepholme, and run alongst to the northwards of it. It lyeth from the Naes e.s.e. about 7 leagues.

For to saile through betweene the Holms, the right & best fareway, you must saile neerest the side of the Flatholme, there it is deepest, with an open wind men may saile alongst so neere by it, without any hurt, that they may castwith a stone upon it. Within, or to the eastwardes of the Holmes, lyeth shooting off from the eastland, a great showld, lying off with a great taile towards the west, which (comming from the west) men might easily saile within. For to avyod it, you must set the Flatholme (when you are passed it) southwest from you, and keepe it standing so, until that you shal haue sailed about a great league, looke out then for a litle Iland, that shal then at the east shore, lye neere about thwart from you, upon it standeth two mils, and aboue upon the maine land standeth one mil. When the mil that standeth upon the high land, cometh to the west end of that foresayd Iland, you shal be past the foresaid taile of the Englisn grounds, & cannot saile within it, goe then e. n. e. alongst by the Englisn grounds, which are flat, so that you may saile alongst by them upon your lead in 3 or 4 fathom so neere as you wil. When then the mil that standeth upon the high land, commeth betweene the foresayd two mils which stand upon the litle Iland, then shal you be altogether past the Englisn grounds, run then boldly towardes the Englisn coast, and so close alongst by it, as you please, towardes Passis or Portshut poynt. From the Flatholm to Passis poynt, in the right fareway, it is deep 14 and 15 fathom. The Welsh side you must shun, and take very good heed of it, because it is very uneven & ful of steep bankes that are needle too, vvhich at many places do fal dry at low water, you may not come neerer that coast then in 12 fathom, for (sailing towards it) you shal haue at one cast ten fathom, and before you can heaue the lead againe, you shal sit fast, al alongst from Flatholm til you come to Bristow.

For to saile through between the Holms

Markes of the English ground

About Passis point men do ankor in Kings road vvhich is between the poynt & the river of Bristow, neerest the river there is good clay ground in 8 or 9 fathom. They that are bound into the river are brought in by the Pilotes. Men may from thence also saile in alongst by the coast to the River of Severne, vvhich is also like the River of Bristow, a faire river to sayle into.

Kings road

For to saile from Bristow to Londey, you must goe away from Passis point w.s.w. until that the Flatholm do come to beare southwest from you, or els until that the three foresayd mils upon the south land doe stand alike farre one from the other, to wit, that which standeth upon the high land, doe stand in the middest betweene the other two, saile then right with the Flatholme, and very close alongst to the southwardes of it,

Cardief. and being paſſed it, goe then forth weſtſouthweſt vnto the Iland Londey.

About three leagues to the northwardes of Flatholm lyeth the town Cardieff in Wales, being a tyde-haven, before it is a good road, as well for ſhippes that are bound to the weſtwardes as to the eaſtwards, where men may lye landlockt almoſt for all windes, to the eaſtwardes and to the northwards of it lye many ſands and bankes, which fall drye at lowe water, and ſo that they make men landlockt for northeaſt & eaſt winds. Hee that is bound into the roade before Cardief comming from the weſt, muſt runne in betwixt Flatholm and the poynt of Cardief, lying ſomewhat to the ſouthwardes of Cardief, and being come about the poynt, then to the northwardes vp alongſt by the ſhore vnto the road.

Silv. Barrey. Cloſe vnto the poynt of Cardief, to wit, to the weſtwards of it, lye two little Ilands, the one next to the poynt is called Silye, and the weſtermoſt Barrey: betwixt Silye and Flatholme lyeth a rock, ſoutheaſt and ſoutheaſt and by eaſt from the poynt, which muſt bee avoyded when you will ſaile through there vnto the roade of Cardief. When it is high water you may ſaile over all that which at half ebbe commeth not aboue water.

The Naes. About fiue leagues weſt from the poynt of Cardief lyeth the Naes, to the weſtwardes of it the land falleth away firſt about northweſt, then afterwards ſouthweſt, or ſouthweſt and by weſt, and ſo maketh a great bay betwixt the Naes and Wormes-head, where there are very good roads for weſt, north, northeaſt, and eaſt winds.

Naeſſand. From the Naes a litle from the ſhore lyeth a great banke called Naeſſand, vvhich lyeth off from thence vveſt and by ſouth, and vveſtſouthweſt at leaſt fiue leagues into ſea. From Wormſhead likewiſe lieth off a bank which is very ſteep,

Helwix. called Helwix, about foure leagues ſouthſouthweſt, and ſouthweſt and by ſouth into ſea, they that come from the eaſtwardes and will goe to ride in the bay betwixt the Naes and Wormeſhead, muſt runne alongſt cloſe by the poynt of the Naes, through betwixt the Naes & Naeſſand, likewiſe they that come from the weſtwardes, and are bound in there, may run through cloſe alongſt by the point of Wormeſhead and the Helwix, it is betwixt them both about an Engliſh mile broad. He that cometh out of the ſea, may come in betweene the foreſayd ſandes or bankes, it is there wide and broad.

Wormeſhead. Wormſhead is a point lying farre out, to look to a farre off almoſt like the Oldhead in Ireland, but it is aboue rounder, & goeth ſloping downe towardes the north, it hath many white chalky ſpots, vvhereby it is very good to be known.

Caldy. About foure leagues to the weſtwardes of Wormeſhead lyeth the litle Iland Caldy, vvhereupon ſtandeth a vvhite Tower, ſhewing off at ſea like a white ſaile, vvhich is ſet there for to know the land by.

Betwixt this Iland and the point of Wormeſhead, the land falleth away with a great bay to the northwardes, vnto Carmarthen and Tinbuy, in this bay it is all over good anckor grouud for to ride. On every ſide of the Iland Caldy men may alſo ankor, and have ſhelter for all vvindes. A little to the northwardes of Caldy lieth a rane of ſuncken rockes, called the Wullox. Hee that Wullox. vvill ſaile about to the eaſtwardes of the Iland, to Tinbuy, may runne cloſe about by it, vp to the vveſtwards, through betwixt the Iland and the ſuncken rockes, leaving them on the ſtarboord ſide, or elſe he may runne alongſt alſo to the eaſtvvardes and to the northvvardes of the ſuncken rockes, leaving them on the larboord ſide, and ſo then alſo to Tinbuy, and anckor there before the towne in fiue or ſixe fathom. To the eaſtvvardes and to the northwardes of the foreſayd rockes, it is alſo good ankoring in ſixe, ſeven, or eight fathom, it is there all cleane ground, and farre off ſhowld water. Men may alſo ſaile through to the vveſtwardes of the Iland Caldy, (vvhich is between the Iland and the poynt of the maine land) to Tinbuy, but it is there narrow, yet cleane, and deep enough.

River of Carmarthen. The river of Carmarthen lieth from the Iland Caldy northeaſt & by north diſtant about foure leagues, the channell for to ſaile in there, lyeth in eaſtnortheaſt, on the eaſt or the ſouth ſide lyeth a great bank, vvhich lieth off farre from the ſhore, and on the off-ſide goeth off flat. For to ſaile in there men may ſound it in alongſt by the eaſt or north ſhore, vntill they be over the ſhowldeſt of the barre, there is vppon it at halfe flood about foureteen foot vvater, and being over the barre, it will be againe foure fathome deepe, or thereabouts, then they may run in forth alongſt by the ſouth ſhore, by the lead, vntill they come vvithin the river.

S. Gawens poynt. Foure or fiue leagues to the vveſtwards of the Iland Caldy, lieth S. Gawens point, the ſouth point of Wales, by ſome called the White point. About halfe an Engliſh mile ſouthſouthweſt from this point, lieth a ſunken rockl caled the Crow, vvhereof men muſt take heede. The Crow

Milford haven. Two leagues to the vveſtwards of S. Gawens point lieth the haven of Milford, a broad and vvide ſound, lying in at the entry northeaſt in, being come in vvithin the points, men may goe vp to the northwardes, eaſtwardes, and ſouthwardes, vnto divers places and roades. About by the north point, men may ſaile vnto Daleroade, there it is good lying in three fathom and three fathom and a halfe at low vvater. When men come a little within the ſouth point in the open of Milford haven, there lyeth a litle Iland or rock like the Mewſtone by Plymmouth, being paſt that, a litle, they may run to the ſouthwards,

into

into a bay, where they may lye land-lockt for all windes.

A little to the westwards of Milford haven lye two litle Ilands, the southermost is the smallest, called Steckholm, and the northermost Scaline. About two leagues northnorthwest, or northwest and by north from thence, lyeth the Iland Ramsey, there betwixt them hath the land a great Bay, called the Broad-bay. Ramsey lyeth at the north poynt, & Scaline, at the south poynt of the Bay, therein alongst the shore is good riding for north, northeast, east, & southeast winds in 7, 8, and 9 fathom. Vpon the north poynt of this bay, lyeth a little towne called S. Davids; to the northwards of it lieth the coast of Wales alongst northeast unto Cardigan.

Steckholm
Scaline.
Ramsey.
Broad-bay.
S. Davids

About two leagues vvest and by south to seawards from the Iland Scaline, and three leagues southwardes from Ramsey, lieth that litle Iland Grasholm, vvhich is a round cleane rock, and about foure leagues off from it, lye also two little Ilands which are fowle, called the Smalles. The lying of them, with the dangers thereof, reade in the first chapter of the third book, in the description of Ireland.

Grasholm
Smalls.

On the northwest side of the Iland Ramsey lyeth the Bishop vvith his Clarks, these are rocks that lie off to the northwards & southwestwards of that Iland a good way to sea. About 5 leagues northwest or somwhat northerly from Ramsey, lyeth another great rock called Mascus, vvhich is all round about fowle, vvith many sunken rocks. He that commeth to saile thereabouts, or to lye by, must take very good heed of them.

Bishop with his Clarkes.
Mascus.

The Iland Ramsey, or the north poynt of Wales, and the southeast point of Ireland, lye about eastsoutheast and vvestnorthwest distant sixteene leagues.

Of the depths about these foresayd coasts.

IN the channel betwixt the Holmes and Bristow, it is deep 12, 13, and 14 fathom, and men may see the land on both sides.

Vpon the coast of Wales about Milford, and to the northwards of it, men may see the land in 42 and 45 fathom.

Of the tydes and course of the streames.

At the Iland Londey, and at the Holmes, an east and vvest moone maketh high water.

At Bristow vvithin, a vvest & by north moon maketh ful sea.

At Milford haven an east and by north, and vvest and by south moon maketh high water.

In the chanel of Bristow betwixt Londey and the Holmes the flood falleth eastnorth east and and the ebbe westsouthwest.

Within the Holms towards Bristow the flood falleth northeast and by east, and the ebbe southwest and by west.

Betwixt Londey and Milford, the streame falleth northeast, and northeast and by east.

Courses and Distances.

FRom the vvest end of Londey, to Biddeford eastsoutheast 5 leagues.
From Biddeford to Ilfercomb e.n.e. 4 leagues.
From Londey to the Holmes e.n.e. 20 leagues.
From the Steepholme to the river of Bristow northeast and by east 12 leagues.
From the Steepholme to the Naes vvestnorthwest about 7 leagues.
From the Naes to S. Gawens point west somewhat northerly 17 leagues.
From S. Gawens point to Milford haven northwest and by north 4 leagues.
From the Iland Scalie to Ramsey northnorthwest 2 leagues.
From Londey to Milford north and by west and northnorthwest 12 or 13 leagues.
From Milford to the Cape of Cornewall southsouthwest. 32 leagues.
From Milford to Silly southsouthwest, & southwest and by south 40 leagues.

Heights.

THE Holmes lye in 51 deg. 40 min.
Milford in 51 deg. 50 min.
The Iland Ramsey in 52 degrees.

Howv these lands doe shevv themselues at sea.

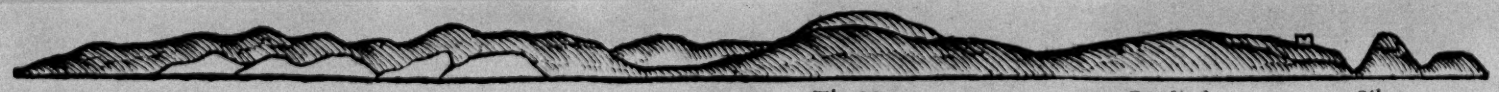
Thus sheweth the coast of England betwixt Ilfercoomb and the Holmes, when you saile alongst by it.

Thus

The entrance of Ilfercoomb.

White-house.

Thus sheweth Ilfercoomb, when you are right before the entry of it, close by the land.



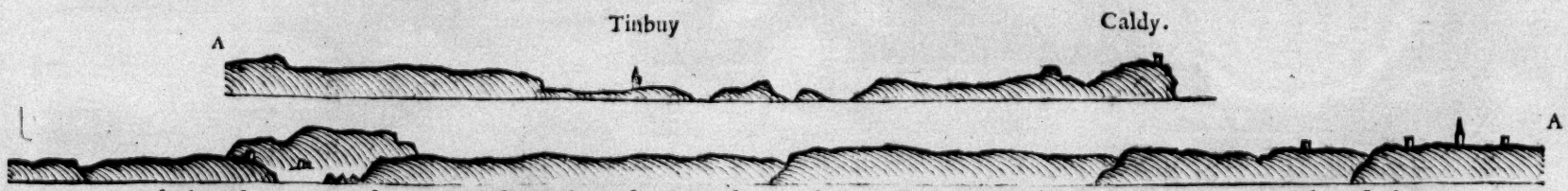
The Naes. Cardief. Silye.

Thus sheweth the land of Wales from Cardief to Wormeshead.

Thus sheweth the coast of Wales betwixt the Iland Caldy and Milford haven, when the northermost is northnortheast, and the southermost is eastsoutheast from you, and that you may but even see it from the poope.

Tinbuy Caldy.

A A



The land betwixt Tinbuy and Milford sheweth it selfe thus, when you saile alongst by the land, as is portrayed in these two figures, at the A A belongeth one to the other: the spire of the tower of Tinbuy is very white.

S. Davids bay.

The land from Milford poynt unto the poynt of S. Davids head, sheweth as is portrayed in these two figures.

From Milford to Tinbuy, men saile alongst by the coast, about 4 or 5 poynts, it is most plaine land, like sand-hils. About two leagues to the westwards of the poynt of Tinbuy, standeth a spirie tower, with two other small flat litle towers more, wherby the coast thereabouts is good to be knowne

To the Booke-binder.

Place the Cardes thus.

Numb.	before fol.
63 and 64	27
65	31
66	33
67	39
68	41

Numb.	before fol.
69	45
70	47
71	53
72	59
73	61

THE

The third parts

THIRD BOOKE

of the

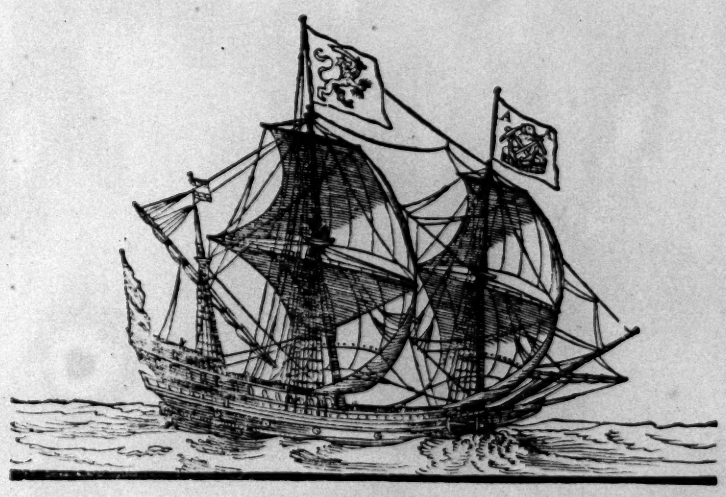
SEA-MIRROVR

of the Weſterne and Southerne

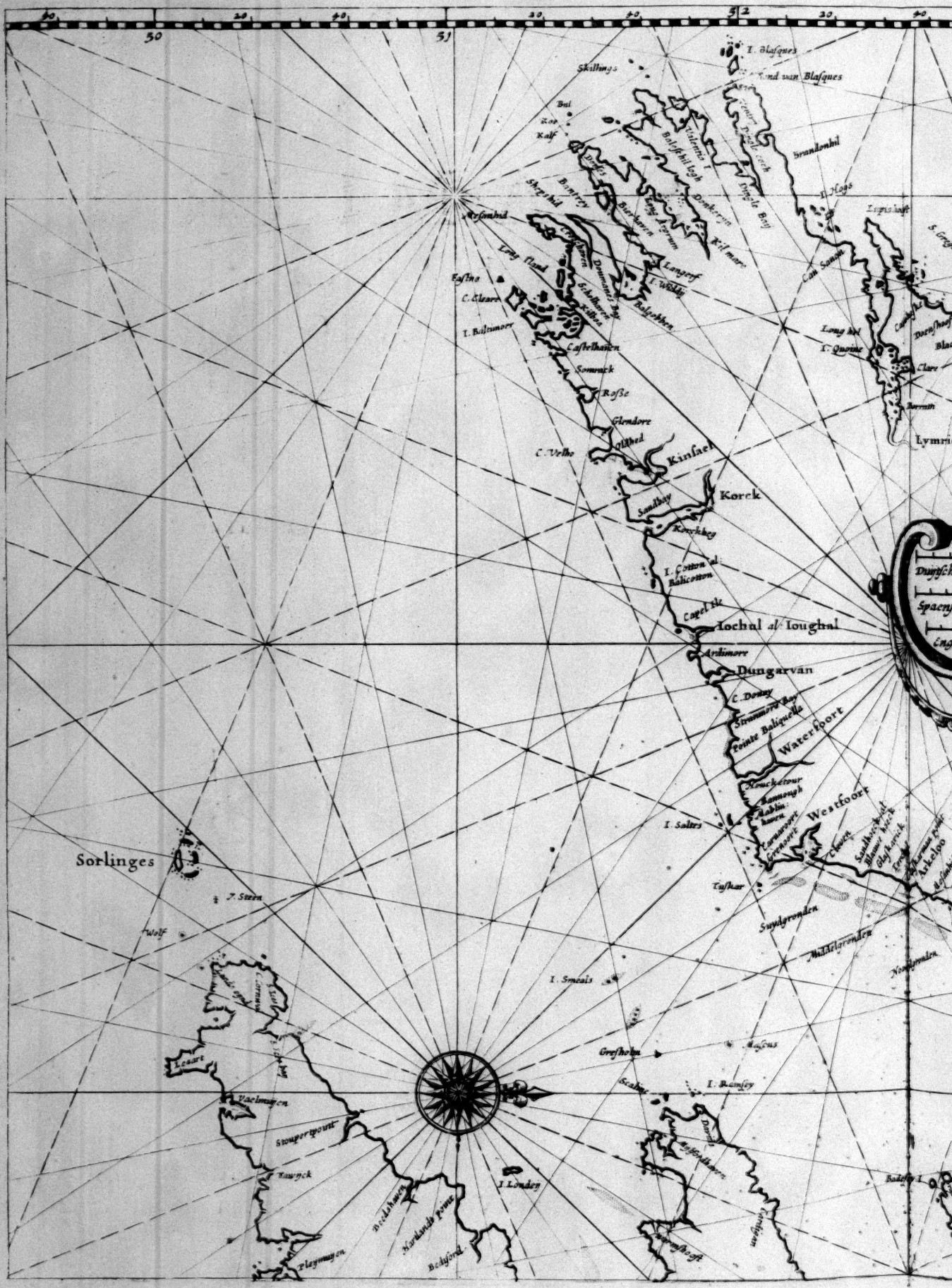
NAVIGATION.

Containing

THE DESCRIPTION OF THE
Coaſtes of Ireland.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.


I. Blasques
Skillings
Bul
Kalf
Brandonhil
Dingle Bay
Ballyheil bay
Donkeryn
Kilmare
Longford
I. Valley
Balyebben
Castelhaven
Somerack
Roße
Glendore
Kinsale
Korck
Sandbay
Rorckbeg
Cape Ile
Iochul al Ioughal
Ardmore
Dungarvan
C. Donay
Strangford Bay
Waterford
Westfoort
I. Saltes
Tuskar
Suydgronden
Middelgronden
I. Smeals
Greshoben
I. Ramsey
I. London
Sorlinges
I. Stern
Wolf
Leoart
Vlielandt
Stoutertpoint
Texwyck
Vlieymen
Beckhaven
Beckford
Norlands point
Dungarvan
Waterford
Westfoort
Lymrick

Zeekaarte van Yerlandt.

Duytsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graedt

Eng: en Fr. mijlen 20 in een graedt

Met Privilegie der Ed. H. M. Heeren Staten generael voor thien jaren.

Dutsche mylen 15 in een graedt
Spaensche mylen 17½ in een graedt
Engs: en Fr: mylen 20 in een graedt

Dit hoogh hackeligh gebergte machmen by de Saltes ook by Grenoart en voor het gat van Waterfoort sien..

Rosse
Withorsh
Stookstein
Clockrood
Vytree
Dunbrodi Abby
Chucke point
Seven Wals
Waterfoord
Passage
Balihack
WATER
FORD.
Crock point
Duncanon
Bannough
Mahlinhaven
Balatogh Castel
Bumhil
Credanhead
Horsbay
Koucketeur ofte toorn van Waterfoort
Noordroc
Tuins
Saltes
Kinbay
Kinnor
WEXFO

De Zuydooſt hoeck van Yerlandt tuſſchen Waterfoort en Glaſkarick

Glaſkarijk

Blaeuwe ſtrale hoeck

Sandhoeck

Middel gronden

Ruyz en Ruin

Colomme

Witte cleven

Sundgronden

Kilpatrijk sl.

Swart kyl Teel

Anterramman sl.

With Caſteel

Caſteel

10 voet

Harmans Pats

Nieuwe gronden

Houting Sd

FORD.

Heare Caſtel

Swarthuys

Groenoort

Withuys

S. Margrits kyl Teel

Margrits hoec

Carnar

Carnaroort

Splaes

Rock wilkes

Tuſkar

Fundel

Caſtarsh

Turchin

Blarock

75

The hil
Dongar
van.

Waterf

Tower
Water

THE THIRD BOOKE of the VVESTERNE NAVIGATION,

Containing the Deſcription of the Coaſtes of Ireland.

CHAP. I.

The ſoutheaſt poynt of Ireland betvvixt VVaterford and the poynt of Glaſkarrick.

FROM the Landes end of England to Waterford, the courſe is northnorthweſt; with that courſe you ſhall fall right with Waterford. But from Silly to Waterford the courſe is north and by weſt ſomewhat northerly forty leagues: betwixt both it is all oaſie and ſoft ground. Nine or ten leagues in the offing from Ireland, lyeth a ſand bank of forty fathom deepe, where commonly fiſhermen lye to fiſh, that is a certaine mark of the diſtance of the land, when you finde it, in cleare weather, and when there is good ſight, then you may ſee the high mountaine of Dongarvan.

The hill of Dongarvan.

Betwixt Iochull and Dongarvan within in the land, lyeth that ſaid high mountaine farre aboue all the other land, ſhewing it ſelfe with three toppes, being called Cape de Quin, or Kary Quin. Sayling alongſt the ſouth coaſt of Ireland you may ſee it farre off at ſea, and lyeth northweſt from the haven of Waterford, therefore comming out of the ſea, and that mountaine being northweſt from you, and ſailing right with it, you ſhall without faile fall right with Waterford.

Waterford

The haven of Waterford lyeth about fiue leagues to the weſtwardes of the ſoutheaſt point of Ireland, being called Carnaroort, the coaſt betwixt both lieth eaſtnortheaſt and weſtſouthweſt, and ſheweth it ſelfe in the offing, within the land, with high hilles two and three double one aboue the other, but by the ſea ſide it is all lowe land, where you may ſee many flat towers vpon it, as you ſaile alongſt by it. The eaſt point of the haven is a low rocky poynt, but it is cleane, vpon it ſtandeth a high white flat Tower, called the Tower of Waterford, which you may ſee farre off at ſea, and is a perfect mark to know this haven by; there ſtand divers more flatte towers to the weſtwards alongſt the coaſt, but this is better to be ſeen then all the reſt, becauſe it is white and higher then the other. The weſt poynt is a high and fowle poynt, there lyeth a ſhowld ſouthſoutheaſt off into ſea, from it the channel is broad and cleane, without it, is eleven and ten fathom deep, and in the havens mouth ſeven fathom, and ſomewhat further in ſixe fathom, it lyeth in north and north and by weſt, within this river, within the eaſt poynt is a good roade in foure or fiue fathom, a league within the rivers mouth there lyeth on the weſt ſide a ſteepe poynt, from thence beginneth a ſhowld lying to the northwardes alongſt the ſhore unto the ſteep poynt of Paſſage, and ſhooteth over from that poynt with a taile, towardes the eaſt ſhore. Paſſage is a village where men paſs over, lying on the weſt ſide of the river, a litle to the northwardes of the foreſayd ſteepe poynt.

Tower of Waterford

Betwixt that village, and that poynt on the weſt ſide is a good roade very fit as well for them that are bound out, as for them that are bound up. In ſailing up you muſt take heede of a little ſhowld, that lyeth off by a caſtle (ſtanding on the eaſt ſide of the river) ſomewhat thwart over the river downwardes, at high water there is no more then two foote water vpon it, a man that looketh for it, may ſee it, it is alſo flat, that a man may ſound it.

About halfe a league northwards up the river from Paſſage, there goeth another river weſtwards vp to Waterford.

About halfe wayes betwixt the haven of Waterford and the poynt Carnaroort, lye two litle Ilands about half a league from the ſhore, called the Saltees, the ſouthermoſt is the greateſt, and lyeth diſtant from the tower of Waterford, directly eaſt almoſt three leagues. Betwixt theſe two Ilands you may ſaile through in fiue, ſixe and ſeven fathom, but you muſt

The Saltees.

keep neereſt the ſmalleſt or northermoſt Iland, for to avoyd ſome ſuncken rockes that lye at the north end of the great Iland, and at low water are drye.

From the northermoſt or ſmalleſt Iland of the Saltees towardes the maine land, lyeth off a ledge of rockes where men were wont to goe over on foote, but now may ſaile over. For to ſaile betwixt the Saltees and the main land, you muſt leaue two thirds of the diſtance of water from the Ilands, and one third part from the maine, and you ſhall haue at low water about two fathom deepe.

Kinbegh. About a half league without the ſouthermoſt Iland of the Saltees, lyeth a rock aboue water called Kinbegh, and ſouthweſt about ſo farre from it, and ſouth and by weſt from the ſouth end of

Kinmor. the Saltees lyeth a ſuncken rock called Kinmor, of the bigneſſe of a ſhip, it cometh with halfe ebbe euen aboue water, it is ſo ſteepe that a man may lye with a ſhipps ſide againſt it, and haue 14 fathom water, ſo that a man (without any danger) may ſaile alongſt by it, as neere as he will A man may alſo (if need require) ſaile through betwixt Kinbegh and the greateſt Iland of the Saltees, but a ſeaboord of all is beſt and ſecureſt.

To the eaſtwards of the rock Kinbegh, ſoutheaſt from the greateſt Iland of the Saltees, lye alſo

The Frails. ſome ſuncken rockes called the Frailes, which may be ſeen at low water, there men may alſo ſaile through within them. Northeaſt from the Saltees lye alſo two rockes, the ſouthermoſt is

Tuns and northrock. called the Tuns, and the northermoſt the north rocke.

Northnortheaſt from the greateſt Iland of the Saltees, or from Kinbegh, and ſouthweſt and

Blackrock by ſouth from Carnaroort, lyeth one rock aboue water, called Blackbrock, that is cleane and clear round about, ſo that a man may ſail round about it freely, without feare of dauger. But a

Barrell. quarter of a league eaſtwardes from it, lyeth a ſuncken rocke called the Barrell, of that a man muſt take heed.

Vnder the Ilands of both the Saltees, a man may ride, vnder the greateſt at the northweſt ſide

Road under the Saltees. neereſt the north end: the marke or knowledge of the road is, a black rock like a boat turned upſide downe, right againſt that you muſt anckor in ſeven, eight, or nine fathom, there it is good ſand-ground, and landlockt for an eaſtſoutheaſt, ſoutheaſt and a ſouth winde, a ſouthweſt winde bloweth alongſt the ſhore. If you ankor neerer the ſhore in fiue fathom or thereabouts, there it is rough ground.

Vnder the ſmalleſt Iland a man may ride at the eaſt ſide in ſeven or eight fathom, ſo that the north poynt of the Iland lye northnorthweſt from you, there you ſhall lye neere the land land-lockt for ſouthweſt, weſt, and northweſt windes.

From the point of Waterford the ſhore lyeth to the eaſtwardes, within the Saltees, eaſtnortheaſt, vntill Carnaroort, with many bayes, and all oaſie and black ſandy ground. A man being acquainted there, ſhould for need, at many places finde good roades, there is nothing that can hurt you except a litle fowle place a litle to the weſtward of Carnaroort cloſe by the ſhore.

He that commeth out of Waterford, and will goe about to the ſouthwards of the Saltees, muſt not goe more eaſterly then eaſtſoutheaſt, for to go cleare of the fowle grounds, which lye to the ſouthwardes of the Saltees, and when the Saltees ſhall be north of him, then lyeth the courſe from thence to the Tuſkar, directly northeaſt, or a litle more eaſterly. But for to go alongſt without the Tuſckar, a man muſt goe at leaſt northeaſt and by eaſt to goe cleare of him. For to avoyd the fowle ground of the Saltees.

The Tuſckar is a great black ſmooth rock, lying like unto a ſhip turned vp-ſide down, but is about twice ſo great; at the north ſide of it lye alſo two ſmall rockes under water. The Tuſkar lyeth from the poynt of Grenoore ſoutheaſt and by eaſt, and eaſtſoutheaſt diſtant one league: from the Saltees eaſtnortheaſt foure leagues and a halfe, from Black-rock alſo eaſtnortheaſt two leagues and a halfe, and from the Landes end of England north and by weſt. Tuſckar.

Southeaſt and by ſouth about ten leagues from the Tuſckar, lye two litle Ilands cloſe one by another, about foure leagues from Graſholme, called the Smaels, at high water and ſpring tydes the water floweth over them, the northermoſt is called Scakum, and the ſouthermoſt is called Kamey, there lye off in the ſea two litle ſhowlds from them, the one northnorthweſt and the other ſouthſoutheaſt. Betwixt the Smaels and Graſholme lyeth alſo a ledge of rockes, which at low water may bee ſeene aboue water. It is not without great danger to goe through betwixt them both, eſpecially with calmes, by reaſon of the tyde that runneth very ſtrong there through; an eaſtſoutheaſt moone maketh high water without the Smaels. Smaels.

From the Tuſckar eaſt and by ſouth about eight leagues, lyeth alſo a great rock, with many ſmall rockes round about it, called Maſcus. Hee that commeth from England and will ſaile towardes Ireland, muſt take great heed thereof, eſpecially when as through weſterly or northerly windes hee ſhall bee driven a litle to the eaſtwards of the courſe. Maſcus rock.

For to ankor under the poynt of Carnaroort, comming from the weſt, you muſt take heed to come no neerer the ſhore then in ſixe fathom, vntill that you ſhall be paſſed by the high hill that lyeth to the weſtwards of the poynt, when you ſhall haue brought out the mill to the eaſtwards the length of a capſtone barre, then you may ankor in 9 fathom, there is very good riding. Road under Carnaroort.

From

From Carnaroort to S. Margets bay, the ſhore lyeth alongſt northeaſt one league, it is betwixt both rocky and fowle, but the fowle ground lyeth not farre off at ſea. For to keepe cleare without it, you muſt keepe ſo farre off the ſhore, that you may ſee the toppes of the double land within aboue the cliffe land, and you need not feare, but if you come ſo neere the ſhore that the double land within, be covered of the foremoſt cliffe land, or that therby it get out of your ſight, you ſhall then ſurely ſaile upon the foreſayd rockes.

By S. Margets bay upon the foreſayd land, ſtandeth a Gentlemans houſe in the hills, when you haue brought that with the mill that ſtandeth within, one in the other, then you may goe into the roade, and leaue the rockes which lye aboue water halfe wayes over the bay, either on ſtarbord or larbord of you; ankor there in fiue or ſixe fathom ſandy ground.

Caliach. About ſouthſoutheaſt from S. Margets bay off at ſea, lyeth a ſuncken rocke, that at low water lyeth dry, called Caliach, for to avoyd it, take heed unto theſe markes: when you come from Carnaroort, and haue Black rock with the great Iland of Saltees one in the other, and keep them ſo, and then ſaile on northeaſt, you ſhall goe

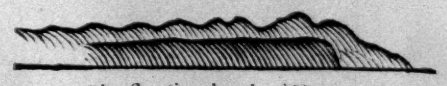
Marks for Caliach. right upon this ſuncken rock. For to goe to the ſouthwards of it, then keepe Black rock with the ſmalleſt Iland of the Saltees one in the other, or els for to goe to the northwardes of it; keepe Blackrock without or to the eaſtwardes of the great Iland, and then you ſhall not need to feare any danger of this ſuncken rocke.

From S. Margets bay to the poynt of Grenore, lyeth the coaſt northeaſt halfe a league.

Grenore. Riſe of Grenore. The poynt of Grenore is not very high, but ſteep and flat on the toppe, off from it goeth a ſhowld about a quarter of a league into ſea eaſt and by ſouth, of very rocks and ſtones, the which at low water falleth dry a good wayes off the ſhore. The ſhips coming from the ſouthwards) that are bound for Dublin or Waſhford, goe in commonly betwixt the Tuſkar and the foreſayd rockes of Grenore, for to come within the banks or ſands. Oftentimes they goe into Waterford for to hire a Pilot to bring them up. For him that will be his owne Pilot, we will deſcribe all the markes that are to be taken heed of, as well for to ſaile into Grenore, as alſo into the deep or haven of Waſhford, as they are now at this time, and hereby doe adviſe men that they doe not alwayes continue ſo, becauſe by reaſon of the floods, the channell doth ſhift, and ſtretch it ſelfe out more northerly, and alſo waxeth deeper.

Comming out of the ſea about a league or two neere unto Grenore, you ſhall ſee the high ragged double land high aboue the poynt of Grenore, vvhich (as is aforeſayd) is not very high, but flat on the top. By that ſaid high ragged double land within, men do know the entrance of the channell of Waſhford, when men doe come from the ſouthwardes and the eaſtwardes. When you haue ſight of the poynt of Grenore, you may boldly goe right with it, untill that ſayd double land, doe ſhew it ſelfe, by eſtimation, but a mans length aboue the poynt of Grenore, as ſheweth this figure.

The high land over the poynt of Grenore.



The flat foreland of Grenore.

Then are you farre enough from the ſhore, not to be in any danger of the ſhowld of Grenore: Or els you may fit your ſelfe that you come no neerer the ſhore then in ſixe or ſeven fathom: but yet for need a man may borrow of the ſhowld in fiue fathom, or foure fathom and a halfe, but you muſt alſo take heed that you goe not ſo farre off from it, that you haue more then eight or nine fathom depth, otherwiſe you ſhould come too neere the banck that lyeth to the northwardes of the Tuſkar, vvhich on the inner ſide is very ſteepe and needle too, upon it is no more then twelue foot water, and cloſe by it ten fathom deepe. If that you keepe the foreſayd ragged high land (as is before ſaid) a mans length aboue the land of Grenore, and ſo ſayle to the northwardes, ſo long untill you bring that ſame high land without or to the northwardes of the ſteepe poynt of Grenore, then are you yet right againſt the ſhowld, and muſt yet ſaile to the northwardes, keeping the mill that ſtandeth next unto the point of Grenore, ſo that you may ſee the top of it even right over the ſteepe point of Grenore. When you keepe it ſo, you ſhall not be in any danger of the ſhowld or riffe. Then as ſoone as you ſee a caſtle (which ſtandeth a litle within the ſtrand) come without the point of Grenore, then may you boldly ſaile towardes it, by your lead, into the bay of Grenore. Greenbay.

The ſaid mill ſtands upon the land of Grenore, a litle within the land, that can ſerue for a mark for not to come too neere as well to the ſhore as alſo to the ſhowld or riffe, for if you come not ſo neere the ſhore that you leeſe the mil out of your ſight, but keep ſo farre off, that you keep ſight of it, then doe you keepe farre enough from the ſhore, and from that rocky ſhowld or riffe. Then when the mill ſhall come to be ſouthweſt and ſouthweſt and by ſouth from you, then you are even paſſed the ſhowld or riffe, go then northweſt and by weſt, and northweſt, according as the winde and tyde ſhall be into the Bay of Grenore.

Or els you may obſerue another marke, Saile

on ſo long north, vntill that you ſee a long black houſe come out to the weſtwardes of Grenore, upon the low land, the which ſheweth like a black rock vpon the land: then you may looffe on towards the ſhore in foure or fiue fathom alongſt by the riffe, and run in ſo untill that you get ſix or ſeven fathom, and preſently afterwards ſhall be eight or nine fathom deepe, but then afterwards it ſhowlds by litle & litle, as you come neere the ſhore.

If you haue a large winde, then ſaile ſo long to the northwards vntill you ſee another litle black houſe come out without the point, ſail then vnto it, you ſhall (ſo doing) haue no danger of the riffe.

In the Baye it is ſhowld water, you may lye there ſo neere the ſhore as you pleaſe, in ſix, fiue, foure, and alſo three fathom, and there you can get a pilot to bring you to Waſhford.

For to ſaile out of the bay of Grenore.

For to ſaile out of the bay of Grenore, you may run out ſo cloſe by the ſhore, that you may ſee but the wings of the mill over the Foreland, and ſo goe on eaſtſoutheaſt into ſea alongſt by the riffe, or according as the wind and tyde ſhall be, ſo long untill that you may ſee the roofe of the mill, then you may goe larger, and by little and little goe more ſoutherly, and then you ſhall ſee it ripple vpon the riffe.

For to ſaile to Waſhford.

For to ſaile out of the bay of Grenore towards Waſhford with a ſhip that draweth little water, you may boldly run alongſt by the ſhore, and ſaile through betwixt the Haenmans path and the Soudre, that is a channell where at high water and ordinary tydes is eight foote water; but with a ſpring tyde there is ten foot water.

The Haenmans paths is a dry ſand, which maketh the ſouth ſide of the channell of Waſhford, lyeing off from the Soudre. The Soudre that is the ſouth point of the main land of Waſhford haven.

Showld of Waſhford.

But if your ſhip goe deeper, then you muſt (ſailing out of Greenebay) goe further off from the ſhore, for to come without the ſand that ſhooteth off from Haenmans paths, yet you muſt alſo take heed not to go too farre there-off, for if you come ſo far off in ten fathom, you ſhall come too neere vnto the bank that lyeth without, which is on the inner ſide very ſteepe & needle too, therefore go no further off the ſhore then in 7, 8, or 9 fathom, but coming ſomwhat more northerly about Haenmans paths, then you may well go off into 10 and 11 fathom; alſo you may not come neerer Haenmans paths then in 7 fathom.

If you deſire to be upon the Barre of Waſhford and to leaue the ſhowld off Haenmans paths, to wit, to go to the northwards, then take heed unto theſe marks: At the north ſide of the chanell of Waſhford lieth a high hill with a round hommock, which is to be ſeen over the Foreland, and a little caſtle in the low land, a litle aboue the ſtrand, againſt the land to looke on; bring that round hommock a litle to the northwards of the caſtle, and ſaile ſo in, but bring not the hommock within or to the ſouthwards of the caſtle, for then you ſhould bee in danger of the ſand of Haenmans paths, vnleſſe it were by need, & with a bare wind, then you might borrow ſo neere to bring them one in another, and ſo to ſaile in, but it is beſt to keep them ſomwhat out one of another, to wit, the litle caſtle to the ſouthwardes of the hõmock. If it ſhould happen that you could not ſee theſe foreſaid markes well, nor diſcerne them, then you may goe about the ſand of Haenmans paths by your lead in 7 fathom without any danger.

For to know then when you are far enough ſailed to the weſtwards, or are paſt Haenmans path, and are open before the chanell, you ſhall ſee in the ſouth land a litle caſtle that ſtandeth about 4 leagues in the land within the ſtrand, in the ſide of the high land of Waſhford, about ſouthweſt & byweſt from you, when that ſhal be upon that point from you, and that it ſtandeth betwixt the two northermoſt litle ſandhils, that are upon the foote ſtrand of the Soudre (which is upon the ſouth ſhore) then are you paſt Haenmans paths; ſaile in then upon the marks of that litle caſtle, & the litle ſandhils over the barre of the haven, there it is at high water about 16 foot deepe. As ſoone as you are paſt the outermoſt flat at the point of Haenmans paths, you ſhall go ſomewhat neerer to Haenmans paths, although it bee very ſteepe, that the tyde doth not bring you upon the taile of the north grounds, where the maſt ſtandeth, that is a fore maſt of a ſhippe that is there loſt, and lyeth there ſuncken into the ſand, by the foremaſt the north grounds are very ſteep and needle too, but without and within very flat going up.

In this chanell & upon the Barre an eaſt & weſt moon maketh higheſt water: but the flood runneth yet afterwardes a halfe tyde ſtrong by the chanel to the northwards; ſo that when it is higheſt water in the chanell and vpon the Barre, yet runneth the tyde thwart over the chanell, therefore a man muſt keepe him ſo neere to Haenmans paths, as is ſaid, that is the cauſe that the taile of Haenmans path is caſt vp ſtillmore and more to the northwardes, and that the channell now lyeth out more to the northwardes then it was wont to doe: and yet hereafter it is like that it will ſtretch it ſelfe more to the northwardes, ſo that the foreſaid markes (by likelihood) will not continue certaine alwayes. Even as the flood after the higheſt water, runneth yet a halfe tyde or three houres ſtrong (in the chanell) to the northwards, ſo alſo runneth the ebbe a halfe tyde to the ſouthwards after the loweſt water, but not ſo ſtrong as the flood.

Being

Being over the ſhowldeſt of the Barre, you ſhall haue three, three and a halfe, and foure fathom, and in the chanell betwixt the north grounds & Haenmans paths againſt the maſt fiue fathom depth, runne in by Haenmans paths, all alongſt until you come to the foot ſtrand, and thrn edge over to the north ſhore, for to avoid the grounds which lye to the weſtwards aboue the Soudre, you may borrow of the ſhowld on the north ſide, by your lead into ten or eleven foot, according to the draught of your ſhippe. In the right deep of this edging over, you ſhall haue at high water 15 foot deep.

The mark of this edging over is a white litle caſtle that ſtandeth on the north ſide of the haven in the valley of the land; when that cometh over the ſteep point of the innermoſt Iland of the two that lye by the north ſhore, and ſeemeth to be about a mans length high, then you may boldly run in n.w. with it, untill that a little chappell within the land, and to the ſouthwards of Waſhford (a litle or about a cables length to the northwards of that other forenamed litle caſtle on the ſide of that high ragged land, that hath ſerved for a mark to ſayle over the Barre) commeth over a black hommock that you may ſee upon the high land, a litle to the ſouthwardes of the caſtle of Waſhford, when you ſhall haue brought theſe marks one in the other, edge then over againe to the ſouth land upon the marks, for then you ſhal be aboue the ſands of the Soudre; and with that courſe alſo ſhall not be in danger of the taile of the ſand that ſhooteth off from the point of Paſſage, which is on the north ſide; but it is there broad and large, that a man may there turne to & againe, it is altogether ſhowld water, of ten, and ten foot and a halfe at high water. Sailing vp vpon theſe foreſaid markes, you ſhall come about the diſtance of a ſhot of a caſt peece without the caſtle of Waſhford to the ſouth ſhore, ſaile then in alongſt by it, and keep the ſounding of the ſhore until you come within the caſtle, there you may anckor, and ſhall find there about 3 fathom water; for a man that is there unacquainted, it is beſt to anckor there, becauſe before the towne lye ſome ſunken rockes; hee that will lye before the towne, muſt (right againſt the kay, or the head of the market) goe a good wayes off the ſhore, becauſe of a ſunken rock that lyeth thereabouts, and go right againſt the weſt end of the town, and ankor there in three fathom, or thereabouts.

To the ſouthwards of the ſands, that lye to the weſtwards or aboue the Soudre, goeth a kreeke through, there is more water then in the edging over to the northwardes of the ſands. The mark for to ſaile through there is: that you keepe the higheſt hommock of the high ragged land (behind Waſhford) right over the caſtle of Waſhford, but there can be nothing gotten by it, with ſailing through there, in regard you muſt nevertheleſſe go over the ſhowldeſt after that you are paſſed the ſands of Soudre, to wit, over the foreſayd depth of ten and eleven foot.

For to ſaile out from Waſhford, with a ſhippe that goeth deepe, you may not lade no deeper then ten foot, or ten foot and a halfe for to come over the foreſaid ſhowld; you ſhall then ſayle about to the northwards of the ſhowld that lyeth within, or to the weſtwards of the Soudre, and goe in and anckor betwixt the ſhowld and the Soudre, there you ſhal be landlokt for all winds except for the ſouthweſt winde you haue little ſhelter, you ſhall therefore bring out your beſt ankor, in the ſouthweſt, and the other in the northeaſt, becauſe that the windes that come out of the ſouthweſt over the land, doe not put you vpon the north grounds. There at the Soudre, you may take in the reſt of your lading, it is a league from the towne.

If you wil ankor before the Barre of Waſhford for to ſtay for the tyde, you muſt ankor a little to the northwards of the Barre, and goe off ſomewhat untill you haue eight fathom, there it is cleane ſandy ground.

In the night there are two fires made vpon the Soudre for the Fiſhermen for to come in by night, by the Haenmans paths he that will ſaile in by them, muſt keepe the higheſt fire a little to the ſouthwardes of the other for to avoyd the north grounds.

Beſides the deepe alongſt by the Haenmans paths, the Fiſher men haue a little channell that goeth out cloſe by the north ſhore, it is there, about ſixe foot deep at high water.

Channell through the bankes before Waſhford.

From the Barre of Waſhford a man may ſayle eaſt and by ſouth, and weſt and by north out and in through betwixt the banks into ſea, or out of the ſea, that is a large and broad channell.

For to ſaile from the Barre of Waſhford within the ſands through towardes Dublin, you muſt keepe the ſounding of the ſhoare, and runne alongſt by it in ſixe, ſeven, or eight fathom, you ſhall ſo ſaile alongſt about a cables length from the ſhore, which is very cleane without any danger, ſo that any man (having but a little knowledge of the land) may ſaile there alongſt by night, onely you muſt take heed not to goe further off the ſhore then in ſeven or eight fathom, for not to come fowle of the bankes, which are on the inner ſide very ſteepe and needle too.

When you are ſayled to the northwardes alongſt by the ſhore, about two leagues from the Barre, you ſhall ſee three white ſpots or rockes in the ſandhill, a little to the northwardes thereof ſtandeth a peece of a wall, much like a pillar of a Church: Right againſt this pillar, a great Engliſh mile from the ſhore, beginneth a ſand called the Ruſch and Ramme, lyeing

Ruſch and Ram.

lyeing from thence alongſt the ſhore to the northwardes, you may ſaile about it on both ſides, but it is beſt to keepe the ſhore, and to run through there within in 6 or 7 fathom, as is ſaid out of feare of the outermoſt bankes, which are very ſteepe, and therefore cannot be ſounded; therfore men doe ſeldome vſe to ſaile there a ſeabord of this ſand.

Right againſt this forenamed Ruſch & Ram, the ſhore maketh a Bay unto the point of Glaſkarrick, when you are ſo farre as this point, then you are paſt the foreſayd ſand.

Poynt of Glaſkarrick.

The poynt of Glaſkarrick is a low poynt, a little to the northwardes of it ſtandeth a caſtle.

Channell through the bankes before Glaſkarrik

When you you are without the bankes in the north channell, and deſire to come within the bankes; then keepe that caſtle (if you can get ſight of it) a little to the northwards of the low poynt, and run boldly right in with it, unto the land, without feare of the groundes, there is a good channell through the bankes; you ſhall not finde leſſe depth then fifteen or ſixteene fathom, vntill you come to the ſhowlding up againſt the ſhore. This Channell lyeth in northweſt.

Of the tydes and courſe of the ſtreames.

AT Waterford an eaſt and by north, and weſt and by ſouth moone maketh high water.

Without the land in the fareway betwixt Silly and Ireland, a ſouthweſt and by weſt moone maketh high water.

In the channell or entrance of Waſhford, an eaſt and weſt moone.

The flood runneth there to the northwardes, after high water a halfe tyde, and the ebbe contrariwiſe to the ſouthwards, a halfe tyde after low water, but not not ſo ſtrong as the flood.

How theſe lands lye one from another, and how they lye from other landes.

FRom Waterford to the Ilands of the Saltees eaſt, but to goe about to the ſouthwardes of them eaſtſoutheaſt 3 leagues.

From the ſouth end of the Saltees to Blackrock northeaſt and by eaſt 2 leagues.

From Blackrock to Carnaroort n. e. 1 league.
But to Grenore 2 leagues.

From the Saltees to the Tuſkar eaſtnortheaſt, but from without the fowle ground to the ſouthwardes of the Saltees northeaſt and northeaſt and by eaſt 5 leagues.

From Black rock to the Tuſkar eaſtnortheaſt — — 2 leagues.

From the Tuſkar to Grenore northweſt and by weſt, and weſt northweſt 1 league.

From Grenore into Greene-bay firſt northweſt & by north, and then weſtnorthweſt 1 league.

From Greene-bay to the barre of Waſhford, north and north and by weſt one great league.

From the Barre of Wathford vnto Waſhford about one league and a halfe.

From Waterford to Graſholm eaſt and by ſouth — — 21 leagues.

From the Tuſkar to the rock Maſcus eaſt and by ſouth 8 leagues.

From Tuſkar to the rocks Smaels ſoutheaſt and by ſouth about 10 leagues.

From Tuſkar to the lands end of England ſouth and by eaſt 40 leagues

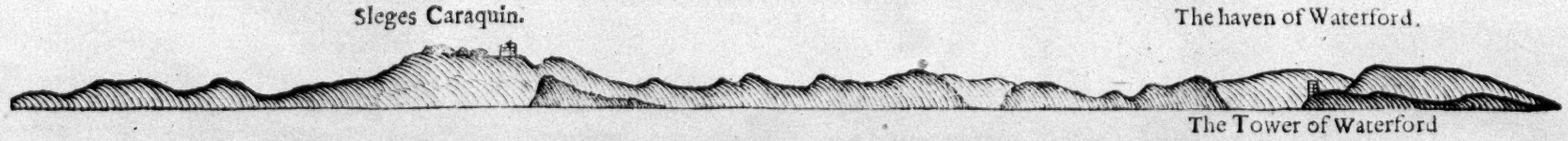
From Waterford to the lands end of England ſouthſoutheaſt, but to Silly ſouth and by eaſt ſomwhat ſoutherly. 40 leagues.

Heights.

Waterford, or the Tower of Waterford lyeth in 52 degrees or a litle more.

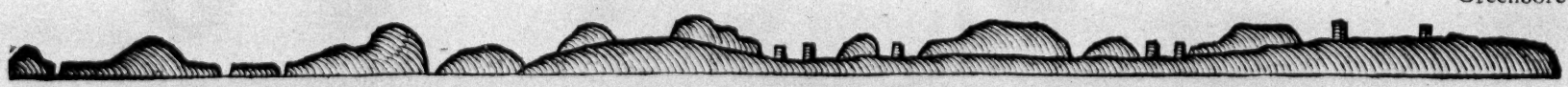
How

Hovv theſe lands doe ſhevv themſelues at ſea.



Thus ſheweth it ſelfe the land about Waterford, and to the weſtwards, with the high land of C. Quin, or Cara Quin, when you come towards the land.

Thus ſhew the Saltees, when they are 3 or 4 leagues weſt and weſt and by north from you.



Thus ſheweth the land between the Saltees and the poynt of Greenoort, when Greenort is about two leagues from you.

The figure following is to be ioyned vnto the former, the A A one to the other.

The land to the northwardes of Greenoore ſheweth thus, when the northermoſt poynt where the croſſe ſtandeth over, is north and by weſt about fiue leagues from you, and Greenore ſouthweſt and by weſt, ſo farre that a man may but euen ſee it from below, and then a man may ſee the Tuſkar from the top in the ſouthweſt.

betweene Waterford and the poynt of Glaſkarrick.

CHAP. II.

The Eaſt coaſt of Ireland from Glaſkarrick to Dublin.

FOR to ſaile forth from Glaſkarrick to Dublin, run all alongſt by the ſhore (which is ſomewhat full of Bayes) and keepe you (as before) in eight, ſeven, or ſixe fathom. Two great leagues to the northwards of Glaſkarrick lyeth a ſand, a great halfe Engliſh mile from the ſhore, called the Glaſkarmen, the ground is very uneven betwixt both. But nevertheleſſe runne through within that ſand, and keepe the ſounding of the ſhore, but not ſo farre from it, that you come into tenne fathom, for then you ſhould ſaile cloſe alongſt by the Glaſkarmen, which is very ſteepe, and about two Engliſh miles, or a halfe Dutch mile long.

Glaſkarmen.

Arkelohead.

One Engliſh mile to the northwards of Glaſkarmen lyeth the poynt of Arkelohead.

Markes for to avoyd the Glaſkarmen.

Sailing through between the ſhore and Glaſkarmen, to the northwardes, a man may ſee two poynts, to wit, Mizanhead, & to the northwards of it Wicklohead. If you keepe Wicklohead even within the poynt of Mizanhead, then you can take no hurt of the Glaſkarmen. But if you would ſaile a ſea-boord of the Glaſkarmen, then keepe Wicklohead a good wayes without the Mizanhead, and ſo runne alongſt a ſeaboord of it, and you can take no hurt of it: But if you keepe the poynt of Wicklohead but even without the Mizanhead, you ſhall not faile to ſaile upon the Glaſkarmen.

Ledge at Arkelohead.

At the north poynt of Arkelohead lyeth a little ſtony ledge very ſteepe and needle too. A man muſt take moſt heed of it (comming from the northwards) and bound to the ſouthwards, and then muſt come no neerer it then in fiue fathom, towardes the ſhore lye ſome litle rockes aboue water: when you come from the northwards, and thoſe little rockes are weſtnorthweſt from you, then are you paſſed it, to wit, to the ſouthwards of that ledge; and then you may againe borrow of the ſhore, upon the lead, commonly men doe keepe ſo farre off the ſhore, that they can take no hurt of the foreſayd ledge.

Baye of Arkelo.

At the north ſide of the poynt of Arkelo is a faire ſand-bay, there is good anckor ground, and all over good riding in eight, ſeven, or fiue fathom, in this bay are good ſtore of herrings caught.

For to ſaile into the channell before Arkelo.

Right againſt Arkelo runneth alſo a channell through the bankes into the ſea. For to ſaile in there out of the ſea, looke out for a round hill within the land; bring that weſtnorthweſt, or weſt and by north off you, and ſayl then in there boldly, keeping it ſo. But if you bring the round hill vveſt of you, and ſaile ſo in, you ſhall ſaile upon the poynt of the north groundes, it is in that channell about ſeven or eight fathom deepe.

About an Engliſh mile to the northwardes of the point is the river of Arkelo but very ſhowld, at high vvater there commeth no more then ſixe foot water.

The coaſt of Waſhford unto Wicklo lyeth moſt north and by eaſt, a litle more eaſterly: but he that will ſaile without alongſt by the bankes, or ſandes, muſt not goe more northerly then northnortheaſt for to avoyd the grounds which lye about Wicklo three leagues off from the land. And to the ſouthwardes the ſouth grounds lye ſcarce a league from the ſhore, there not long ſince a Pilot keeping bad reckoning, ran without the ſandes alongſt north and by eaſt, and ſailed thwart of Arkelo behind a taile of ſand that eth off from the north to the ſouthwardes, and there loſt his ſhip, Arkelo lay from them (when they ſat upon the ſand) weſt and by ſouth.

Mizanhead

About two leagues to the northwardes of Arkelo lyeth Mizanhead, it is a black head. Betwixt Mizanhead and Arkelo, in the fareway it is eight and nine fathom deepe, it is alſo betweene them both alongſt the whole coaſt, good ankoring and cleane ground.

Wicklohead.

From Mizanhead to Wicklohead it is alſo two leagues, but this reach is ſhorter then the other to Arkelo.

Wolfe.

One Engliſh mile to the ſouthwardes of the poynt of Wicklo, lyeth a little rock cloſe by the ſhore, called the Wolf, it commeth at halfe tyde aboue water, the fiſhers boats run through within it, but it is not to be done with ſhips.

Horſeſhoe

Right to the ſouthwards of Wicklohead ſomwhat further out then the poynt, lyeth alſo a rocky ſand, called the Horſe-ſhooe, cloſe unto the poynt, about ſouth and by eaſt from it, a man ſhould for need (when hee cannot doe better) ſaile through there within it, but he muſt be very wel acquainted with it, or els not well to be done; without, it is more certaine and beſt, going off ſomwhat to the deep. If you keepe the poynt of Brahead a little without Wicklohead, then you can take no hurt of it, or if you keepe the high inner land ſo that you may even ſee it aboue the land of Wicklo, and goe not altogether hidden behind it, then you goe there without it in fiue fathom. The poynt of Wicklo is ſteepe & ſtony with a double topt little hill, within ſtandeth a little chappell; when you can ſee that through the ſaddle of the hill, then you are right againſt it, and haue it on your ſide, the village of Wicklo lyeth to the northwards of the poynt in the Bay, there is a litle haven, which at high water hath ten foot water.

In the Bay the ground is ſo hard and chinnell, that

zanhead

cklo-
d.

olfe.

orfeshoe

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng: en Fr: mylen 20 in een graedt

De oost Cust van Yerlandt tusschen Clyskarick en Dubling.

CATERLAGH.

WEXFORD.

Bray

Wicklo Castel

Wicklo

Arklo

Clay Karmanpoint

Chappelo

Tirchil

Carrickcom

Blanne Pirle hoock

Clay Karrick

Sandhoock

Clay Karmen

Russel Ram

Nord gronden

Middelgronden

Sudgronden

Dubling
Klantarf
Ringsondt
Lamben
Yerlands en
Sunckerbroodt
Dalke
Bertsen rede
Hedenbo Hout
Brae
Brahel
Mienholm
Dalke
Dalke
Ymgaets
Nieastel
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that the anckors doe not hold there, but without the Bay somewhat farre from the shore, towardes the banckes, the ground is somewhat better.

Channell through the bankes thwart of Wicklo.

Thwart of Wicklo also is a channell through the bankes, for to saile that out or in, keepe the Castle of Wicklo, that you may see it open of the poynt, thereupon you may boldly saile out or in.

Fourteene English miles from Wicklo lyeth the poynt of Brae, a high steepe stony poynt, and the highest land thereabout on the sea coast.

Betwixt Wickloo and Brae lyeth out a flat poynt with a little Fisher village called Nicastel, there (sailing alongst) you haue foure, fiue, and sixe fathom deep, but from the flat point unto the steepe point of Brae, it is well fourteene fathom deepe, the land lyeth there about north and north and by west.

Sugerloafe

Within the land lyeth a high hill of fashion like a suger-loafe, that is the fartheste in the land of the three hills which they call the Vineyards, when you haue them through one another, and and are northwest, and so keepe them, then may you boldly thereupon run through the bankes into sea or out of the sea upon these markes may come in within the bankes, that is a very large and broad chanell.

Thwart from that foresayd sugerloafe to the southwardes of Brae, lyeth a banke that is not deeper then foure fathom, very stony and sharpe ground.

Brachead.

Brahead is very steep likewise, also the ground by it, it is ten fathom deepe close by the shore, to the northwardes of the poynt lyeth a little tyde-haven, there stand the houses called Brae on the north side.

Iland Dalke.

From Brachead to the Iland Dalke (lying at the south point of the Bay of Dublin) the course is north and by west foure English miles, there betwixt both goeth in a bay.

At the northeast side of the Iland Dalke, lye some rockes, lying alongst the maine not farre from it. Men saile within the Iland through, and leaue all the rockes and the Iland lying to seawards.

The Sound of Dalke.

The Sound betwixt the Iland Dalke and the maine land, is called the Sound of Dalke, lyeth north northwest, and north and by west through, is seven, eight, and nine fathom deepe, men may ankor under the Iland, neereste the land, there is good sandy ground, or somewhat further in there lyeth a round rock, neereste to the maine land, there men may make fast a cable on it, and an ankor thwart over the channell, towardes the other rockes, because of the tydes, for the tyde runneth there very strong through. A s.s.e. and a south and by east wind bloweth there right in, but in regard it is there very narrow, there can go no great sea, with a southeast winde you are landlockt of the Iland, and a south winde commeth off the maine land.

From the Iland of Dalke vntill you are passed the village of Dalke, the shore lyeth northwest and by west, before the village you haue some succour for a southeast winde, the winde being more easterly, you lye in the open sea. You lye there in eight or nine fathom, the neerer the Iland the deeper, the place is called the Berton road; you may not anckor further to the westwardes then before the village: to the westwardes of the village the ground is fowle and sharpe.

Berton road.

Houth

The north poynt of the Bay of Dubling called Houth or Hedeho, is a very high point, it seemeth a farre off as if it were an Iland, but it is fast to the maine land with a small and very lowe necke: to the northwardes of it lye the Ilands Irelands-eye and Lambey, those may bee seene (being to the southwardes of the poynt Houth, and being before the entrance of Dubling) over that foresayd small necke of land.

From the Sound of Dalke to the Barre of Dubling the course is northnorthwest, in the fare way it is deepe nine, eight, seven, fiue, and foure fathom, the neerer the Barre the shoulder water. When you saile up, you must keep the westermost rock, that lyeth without at the Iland of Dalke, a handspikes length open of the Iland, or the other rockes, and shall so come before the entrance, without having any let or hinderance of the sand. Or you may saile more to the eastwardes right towardes the lowe land of the norther shore, and then by your lead alongst by it to the Barre.

If you come from the northwardes, you may runne in close about the poynt of Houth by your lead, and then all alongst by the norther shore, untill you come to the mouth of the Barre, there alongst it is the deepest water, but towardes Dalke it is shoulder. From the south shoare runneth off a great tayle of sand, almost unto the north shoare. To the northwards of it goeth the deepe in. Vpon that taile a litle within the point stands a beakon of a mast, made by the English men, called the Paersing.

Paersing.

For not to come too neere this foresayd sand, coming from the southwards, look out for the Iland Irelands eye, keep that so, that you may but even see it over the low land close after unto the high land of Houth, so you can take no hurt of that sand. When the Tower of Saint Pattickes in Dubling, which standeth on the land side of Dubling, commeth right over that Beakon the Paersing, then are you yet right against the poynt of the sand which shooteth out a good way to the northwards of the Paersing.

Marks of the sand.

For to goe cleare of that, you muſt runne ſo far to the northwards, vntill the Paerſing commeth right over a little caſtle with three turrets, or little towers, which ſtandeth to the ſouthwardes of the towne, or when the Paerſing commeth betwixt that foreſayd little caſtle, and the town, then are you aboue the poynt of the ſand, then goe in weſt and by ſouth vntill you come over the ſhowldeſt of the barre: there is at ſpring tyde 15 or 18 foot water, but at low water and neep tyde, not more then ſixe foote, you may found it on both ſides. When you are over the ſhowldeſt of the Barre, then anckor within the ſand by the beakon in Poelbegh, there it is at high water foure fathom deepe. The marke of this road is, that you bring that afore written hil like a ſuger loafe (that here before is ſpoken of, and ſerveth for a mark for to ſayle by into the channell of Wicklo) over another lower hill, then are you in the beſt of the roade, bring out your beſt anckor in the ſouthweſt, againſt the blowing of the ſouthweſt windes, which ſometimes come powring downe there very ſtrong out of the ſouthweſt over the high land, and the other in the northeaſt. At low water the ſandes lye dry there round about the roade.

Roade in Poelbegh.

Men may alſo anckor ſomewhat further in, at the north ſide of the ſound, right againſt a village called Klantarfe in a poole, where at low water remaineth nine or ten foote water: but round about the ſhippe (as it is in moſt places of the haven) it doth fall altogether drye, ſo that there a ſhip hath but even roome to winde up to and againe. Men do morre there ſouthſoutheaſt and northnorthweſt. A ſoutheaſt and northweſt moone maketh there the higheſt water.

Roade by Klantarfe.

If the ſhips that come there be any thing great, they muſt ſtay in Poelbegh, cloſe before the towne it is very ſhowld, and falleth at low water altogether drye: with an ordinary tyde men cannot come before the towne with a ſhip that draweth fiue foot water, but with a ſpring tyde with ſhippes that drawe ſeven or eight foote water.

At the north ſide of the river, a little further out then the towne, right over againſt Ringſend, lyeth a little Iland, within it is a fit place to make ſhippes cleane.

The ſandes or bankes that lye alongſt this eaſt coaſt of Ireland from the Tuſkar vnto Dalke, are on the out ſide, or on the eaſt ſide very ſteep and needle too, ſo that men may not come neerer them then in 24 and 25 fathom, in 20 fathom a men are cloſe by them, they are not deeper at ſome places then one fathom, or one fathom and a halfe: but at the north end by Dalke, about two fathom and a halfe, and three fathom deepe, all ſtony ground, and lye on the off-ſide alongſt northnortheaſt and ſouthſouthweſt, at the north end they lye about 8 Engliſh miles, but at the ſouth end they lye but two Engliſh miles from the land. If you are bound for Dublin, and will goe without theſe ſands, runne then ſo farre to the northwardes, vntill you can ſee the litle Iland (Irelands eye) without the poynt of Houth or Hedehoo, runne then right on to Houth or Hedehoo, and then you ſhall take no hurt of the north grounds.

Marks for to ſaile without the banks.

Of the tydes and courſe of the ſtreames.

ON the eaſt coaſtes of Ireland to the ſouthwards of the bay of Dublin, a ſouthſoutheaſt and northnorthweſt moone maketh high water.

At Dublin a ſoutheaſt and northweſt moon.

The flood runneth from the Tuſkar without the bankes alongſt betwixt Ireland and England northnortheaſt, and the ebbe ſouthſoutheweſt.

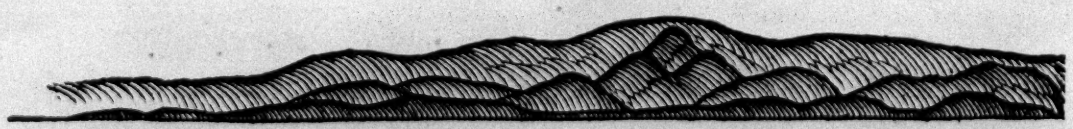
How theſe places lye one from the other, and how they lye from other lands.

FRom the poynt of Glaſkarrick to the poynt of Arkelo north & by eaſt 4 great leagues.
From Arkelo to Mizanhead north and by eaſt ſomewhat eaſterly 3 leagues.
From Mizanhead to the poynt of Wicklo north and by eaſt ſomewhat eaſterly 2 leagues.
From Wicklohead to the flat poynt by Nicaſtle north 3 leagues.
From Nicaſtle to the poynt of Brae north, and north and by weſt 1 ½ league
From Wicklohead to Braehead north, and north and by weſt 5 leagues.
From Braehead to the Iland of Dalke north and by weſt 2 leagues.
From Dalke to the barre of Dublin northnorthweſt 2 ½ leagues.
From the ſound of Dalke to the poynt Houth northnortheaſt 2 ¼ leagues.
That courſe runneth without the poynt Houth, Irelands eye, Lambey, and Rock a Bill.
The bankes lye from the Tuſkar to the north end northnortheaſt and ſouthſouthweſt.
From the Barre of Dubling to Holyhill in the Iland Angleſey eaſt and by ſouth 19 leagues.
From the Barr to the town Dubling weſtſouthweſt 2 leagues.

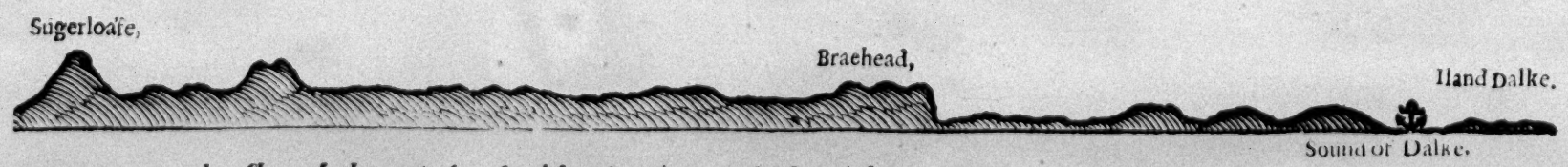
Hovv theſe lands do ſhevv themſelues at ſea.

Sugerloafe. Braehead.

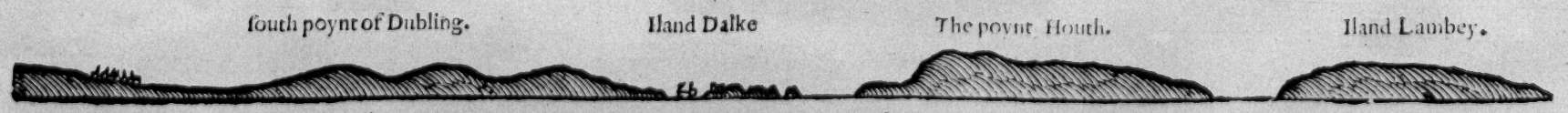
Thus ſheweth the coaſt of Ireland when that Sugerloafe is northweſt, and the poynt of Braehead northweſt and by north about ſeven leagues from you. When that Sugerloafe commeth northweſt and by weſt from you, then may you runne ſo in, over the north grounds through a broad channell of nine and ten fathom deepe.



When the Sugerloafe is thwart from you, it ſheweth with the high land within it, thus.



Thus ſheweth the coaſt of Ireland betwixt the Sugerloafe and the Iland Dalke, lying at the ſouth poynt of the Bay of Dubling, when a man is about Braehead one or two leagues from the land.



When a man commeth from the ſouthwardes, thus ſheweth the Bay of Dubling with the poynt Houth, and the Iland Lambey to the northwards of it.

CHAP. III.

The East Coast of Ireland from Dublin unto Strangfort haven.

THE North poynt of the Baye of Dublin called Houth, is round about cleane, so that a man may anckor round about it. To the northwards of it lye the Ilands of Irelands-eye and Lambey. Irelands-eye is the smallest, it lyeth betwixt the aforesaid poynt Houth and Lambey: at the west side of it standeth a little Chappell, right against it you may ride. At the south end lyeth off a stony riffe which must bee avoyded. Right over against that Iland in the maine land lyeth a haven for small shippes, at a little towne called Malcheall.

Irelands-eye.

Malcheall.

Lambey. Vnder Lambey you may ride vnder the north side for a southerly winde, in twelue and thirteene fathom, but for a sea winde, you must shift, vnto the west side by a Gentlemans house, and anckor there, but it is not very good lying there, because alwayes there commeth in a great sea.

Drodagh. About fiue leagues northwest and by north from Lambey, lyeth the haven of Drodagh, betwixt them both (neerest Lambey) close by the land lye the rockes called the Skires. About two miles to the northwardes of Lambey lyeth a great rock called Rock a Bill, you may runne round about it on both the sides.

Drodagh hath a narrow crooked haven, which is not good to come into without a Pilot, or some one that is well acquainted with it.

Foure or fiue leagues to the northwardes thereof lyeth the haven of Dondalk, which is very showld, and little used, at low water a man may goe over a foot.

Carlingford. North and by west about thirteene leagues from Lambey, seven leagues to the northwardes of Drodagh, and two leagues from Dondalk, lyeth the haven of Carlingford: the north poynt of that haven is somewhat fowle and rocky, but you may goe in about it by your lead: the south poynt is very fowle with rockes and sunken rockes, which you must shunne, and runne in by the northerne shoare: Some say that men may runne in through betwixt the rockes and the souther poynt with small shippes, but it is not without danger. When you are within the suncken rockes, you must runne over to the souther shore, and in alongst by it, untill you come before the towne of Carlingford, and anckor there in sixe, seven, or eight fathom, so shallow as you will; you may saile in upon the oase, and saue a shippe without anckor or cables. Greene-castle lyeth at the northeast side of the haven, two miles from Carlingford.

Greencastle.

About seven leagues northeast, or somewhat easterly from Carlingford, lyeth a point called S. Iohns poynt: betwixt both about halfe wayes lyeth the Mount of Carlingford, a high mountaine. From S. Iohns poynt lyeth off a ledge of rockes, whereof you must take heed. A great league to the northwardes of Saint Iohns poynt, lyeth Arglas, from thence forth to the haven of Strangford it is three small leagues.

S. Iohns poynt.

Arglas.

From the north poynt of the haven of Strangford, lyeth off a fowle ledge of rockes. A little off from the south poynt lyeth a sunken rocke, which at halfe ebbe commeth aboue water. For to saile into this haven, you must leaue this suncken rock on the larboord side, and goe to the northwards of it, but must take good heed of the foresayd ledge at the north poynt. A man may also goe in through to the southwardes of the foresayd suncken rocke, betwixt it and the poynt (but to the northwards of it) is the best and the broadest channell. Somewhat further in lyeth also another suncken rocke at the northeast side, that must bee left on the starboord side in going in. When that you come then so farre as Audleys Castle, there you may anckor or runne in about the poynt on the larboord side, and anckor there vnder it.

About a league and a halfe to the northwardes of Strangford lye the rockes Southrocke and Northrock, of them reade in the Chapter following.

Of the tyes, and course of the streames.

ON these coasts a southsoutheast & northnorthwest Moone maketh high water.

The flood commeth here from the southwardes, and also from the northwardes, about the north part of Ireland, and meete one another about right against Carlingford, where they stoppe one the other. The ebbe contrariwise falleth (to the northward of Carlingford) to the northwards, and (to the southwards of Carlingford) to the southwards.

Courses and Distances.

FRom Lambey to Drodagh northwest and by north 5 leagues.

From

De Cuſten
van Yerlandt
van Dublingh
tot Strangfoort.

Neurij

Narrowater

Dundalck

Carling
foort

Gren Caſtel

Drodagh

Maude tower

Skeres

Rice abil

Lambey

Yerlands ey

Hedchde
Hout

Strangfoort

Dondrom

Grumme ile

Dumtsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng. en Fr. mylen 20 in een graedt

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From Lambey to Carlingford north and by weſt 13 leagues.
From Carlingford to S. Iohns poynt northeaſt ſomewhat eaſterly. 7 leagues.
From S. Iohns poynt to Strangford northeaſt and by north 4 leagues.
From Lambey to the Southrock northnorth-eaſt 21 leagues.

Hovv theſe lands doe ſhevv themſelues at ſea.

The Iland Lambey ſheweth it ſelfe thus when it is from you northweſt and by north one league off.

Thus ſheweth the land a litle to the ſouthwards of Carlingford when this high poynt is northweſt from you about fiue leagues. He that will goe into Calingford, muſt goe in cloſe by the ſhore.

The land to the northwardes of Carlingford ſheweth it ſelfe thus when the northermoſt poynt is north and by wſt from you fiue or ſixe leagues.

CHAP. IIII.

The Coastes of Ulster, betvvixt Strangford and Banthaven, together vvith the coasts of Scotland over against it.

FROM Strangford haven to the northwardes lyeth the coast forth northnortheast one league unto a poynt which some doe call the poynt of Arglas, others the poynt or head of Molines; from thence falleth away the coast unto the Bay of Knockfergus northnorthwest.

Point of Arglas. C. de Molines.

By that foresaid poynt of Arglas or Cape of Molines, to wit, to the northwardes of it, two litle miles, lye two great rockes: the southermost is called the Southrock, it lyeth about two miles to the southwardes of the northermost, called the Northrocke. From the south end of the southrocke lyeth a ledge of rockes at the least two miles off, also one from the northeast poynt a great wayes northeast off into the sea. The North rocke is a great plat of rockes, whereof many at high water are under water. There goeth also from it a fowle ledge off unto the land, so that a man may hardly saile through betwixt the rockes and the maine land, except a man be extraordinary well acquainted. But betwixt the Northrock and the Southrock goeth a faire broad Sound through, where men may well turn to and againe, and at many places may anckor, it is all over good cleane sandy ground, sixe, seven, and eight fathom deepe.

Southrock

Northrock.

From the east side of the Southrock unto the Ilands at the east poynt of the Bay of Knockfergus, called Koppen, or Kopland Iles, the course is n. n w. or somewhat more northerly, about sixe leagues: for when men saile from the east side of these Ilands to the Southwardes, with a southsoutheast way, they goe farre enough without the North and Southrockes. There betwixt them both lye divers more little Ilands, rockes, and suncken rockes, and showids, for the which men must take good heed when they will come neere by the shore.

Coplands Iles.

The Coplandes Iles lye about an English mile from the land, they are on the off-side to sea-wardes, cleane, but from the inner side there goeth off some ledges and fowle ground, in the mid-way, there going through it is fiue and sixe fathom deepe, but it is best to go without, except for them that are well acquainted. The north poynt of the bay of Knockfergus, lyeth distant from the Copland Iles, three or foure leagues northwest or somewhat northerly, for with a southeast course from the north point towards the foresaid Ilands, that goeth far enough without them.

The Bay of Knockfergus is a great broade Sound; About three leagues inwardes in the Bay, west from Copland Iles, is the road before Knockfergus, there is good anckor ground in three fathom, and three fadom and a halfe. Somwhat more further out towards the north point also on the north side of the bay, standeth a Castle, called Mouse-hills Castle, by it is a sandy bay, where is good anckoring as well for great shippes as small, for the north and the northwest windes, but a southwest winde maketh a bad road in these places.

Bay of Knockfergus.

A little to the northwardes of the north poynt of the bay of Knockfergus, lyeth a little Iland called Kow, from thence lyeth the coast of Ireland forth northnorthwest about nine or ten leagues unto the Iland Raghleens. Betwixt them both lye the nine Maydes one great league without the land, and two great leagues to the northwardes of the Bay of Knockfergus, they are great rockes, that lye but little aboue water, or low rocky little Ilands, and a multitude of rockes under water about them, that lye off so farre to the northnortheast, that men cannot come neere them within fiue or sixe Englisn miles. There goe some Creekes through the fowle groundes, where men (for neede) might sayle through, but it is no wisedome to goe about it, when there is no neede, and that men can doe better. Not very long since, there came a man (by night unacquainted) therein, and ranne through onely uppon the sight of the breaches of the water, and got through without any hurt, but not without great feare and danger. Hee that commeth off from the Faire Forland, must (at least) go southeast and by east, for to run alongst cleare of these fowle groundes. From the west side also lyeth off a little tayle of a ledge of rockes, towardes the land. Further, it is there cleane, that men may sayle through there within, but men must not come neerer the Maydes, then about halfe channell betwixt them and the mayne, but the mayne land so neere as they will, vvhich is both cleane and cleare, with many Bayes, vvhere men may every vvhere anckor, yet heere and there lye some rockes, but they are all aboue water: There is nothing that can hurt but men may easily see it.

Kow Iland.

The Maids

A great league to the northwardes of the north poynt of the bay of Knockfergus, and an halfe league southsouthwest from the Maydes, lyeth a haven called Old-fliete. For to know it vvhen men come from the northwardes, they shall see two flat little Towers, the one somewhat higher then the other, like as if men saw a shippe with maine sayle and foresaile, without

Oldfliet.

Banthaven
Castel
Skores portruss
Kieckens
Danluzie Castel
Port Bellebrie
C. Pingore
Schaeps eylant
Ronathleens
Faire forland
Castel
Scherre haeck
Stacht landt
Olifluet
Deffast
Veerhuys
Knocfergus
Holuhed
I Kouw
I Kne
De Mandz
Bangor
Copland eylandt
Strangfort haven
Haeck van Argias
Hooft van Holiwo's
Bruell
Sanuigh hunsen
Ploegh
Noordtroek
Sandtroek
Lougreau
Mont van Galue

Duytsche mylen 15 in een graedt
Spaensche mylen 17½ in een graedt
Eng en Fr mylen 20 in een graedt

Longendal

Yley

Surey

Ile Sandt

De Kust van
Ulster tusschen Strang
foort en Bandthaven
met de Custen
van Schotlandt
daer tegen over

C. Cantyr

Arren

Lamlash
Lamme ile

Elzee

Commer
ile

Kogtel Killrenid

Hoghsland

Saltcote

Vruym

Aer

Ryder na Glasgue

Dunbriton

78

without toppe or toppe-ſailes: theſe ſtand vpon the north ſide of the Bay.

Iland Knee. At the ſouth poynt lyeth a ſmall round litle Iland or rocke called the Knee, a ſpeciall marke for to know this Bay; Men run in there amiddes the chanel. But when you come from the ſouthwardes, and get ſight of the litle Iland Knee, then run in cloſe about it.

From Oldfliet to the northwardes vnto faire Forland, the coaſt is very cleane, that you may ſail cloſe alongſt by it, boldly without any feare, except you runne farre off from land, without the foreſayd maydes towardes the Scottiſh coaſt.

Faire Forland. Faire Hid, or Faire Forland is the outermoſt northeaſt poynt of the maine land of Ireland, and lyeth a little to the ſouthwards of the Iland Rachleens, ſo that this poynt and the eaſt poynt of Rachleens lye neere about ſouth and north one from the other.

At Rachleens, or Faire Forland the northeaſt poynt of Ireland, come Scotland and Ireland neereſt one to anorher. The Rachleens is an Iland that men may ſaile round about, either to the northwardes, or to the ſouthwardes, as they will, according as it happeneth beſt convenient with wind and tyde. At the ſouthweſt ſide is a faire bay, where is good lying almoſt for all windes. When men come from the weſt, it ſeemeth to the ſouthwardes of the Rachleens to bee cloſe without any opening, becauſe the eaſtermoſt poynt of Ireland Faire Forland, lyeth ſomwhat further out, behinde the Rachleens', but when they come neerer betwixt them, ſheweth it ſelfe open by litle and litle. On both ſides are the ſhores flat and cleane, ſo that men may ankor there where you will, either by the coaſt of the maine land of Ireland, in 8 or 9 fathom, or in the bay under the Iland in cleane ſandy ground. Over againſt the Rachleens, cloſe by the maine land, lyeth another litle high Iland, called the

Lambes Iland. Lambs or Sheeps Iland, to the ſouthwards of it, betwixt it and the main, men may not ſaile there about it, but betwixt it and the Iland Rachleens it is broad enough.

From the Rachleens unto the Skires Portruſh, the courſe is weſtſouthweſt diſtant 7 leagues. About two leagues to the eaſtwardes of it, in the maine land, lyeth Porto Belletrie, a bad roade for great ſhippes, the ground is there fowle and ſharpe.

Chickens. Betwixt Porto Belletrie and Skires Portruſh, neereſt vnto Skires Portruſh, lye the Chickens, theſe are ſuncken rockes, which may be ſailed about on both ſides, for to come to anckor under Skires Portruſh.

Skires Portruſh. The Skires Portruſh is a rocky Iland, it hath on the ſouth ſide a faire bay, where you may lye in ſixe and ſeven fathom, cleane ſandy ground land-lockt for all winds, except for the eaſtnortheaſt winde, which bloweth alongſt the ſhoare, there open in. For to come vnder this Iland from the eaſt, you muſt goe cloſe, alongſt by the ſhore of the maine land, for to ſhun theſe foreſayd ſuncken rockes the Chickens. It is there all over cleane and cleare: or els if you were minded to goe without, or to the northwards of the Chickens, for to come under the Iland, you muſt ſhun the Eaſt poynt of the Iland, becauſe of a ſunken rocke that lyeth a litle off from the eaſt poynt of the Iland. At the northweſt ſide of this bay is alſo a ſmall narrow channell, where you may ſaile through.

A litle to the weſtwards of Skires Portruſh lyeth the Banthaven, there alongſt you may ſaile up unto the new towne Colran, it is a bad channell to come in, as well by reaſon of the ſtrong freſhut that commeth out, as alſo becauſe it is very ſhowld: with ſhipps that draw eight foote water, you muſt haue at leaſt three quarters of the flood before you can goe in. Banthaven

The coaſt of Scotland.

Loughgreau. THe haven or ſound of Loughgrean or Lookreen in Scotland by the point of Galloway, lyeth diſtant from Faire Forland the northeaſt poynt of Ireland, eaſtſoutheaſt about thirteene leagues, but the poynt called Cantir, lyeth diſtant from Lookreen northweſt and ſoutheaſt 9 leagues, there betwixt them both goeth up a great broad ſound northeaſt in, called Dunbritain Firth, through which men ſaile up unto Glaſkow in Scotland. Dunbritaine Firth

The ſound of Lookreen you may ſaile in, and a good wayes you may turn in to and againe for to anckor there within for weſterly windes, if you doe come no neerer the ſhores on either ſide then in foure fathom, you can take no hurt: you may anckor ſomewhat in, by the ſecond high poynt on the eaſt ſhore in ten or 11 fathom.

About ſeven leagues to the northwards of the poynt of Galloway in the foreſayd great ſound, lyeth a high ſharpe Iland, cleane round about, of faſhion almoſt like unto a pook of Hay, called Ailza, or Elzee, there you may boldly ſayle round about it, it is there round about it, and cloſe by it, eighteen fathom deepe. Elſee Iland

From Elzee northwardes ſixe leagues, lyeth alſo another litle Iland, cloſe by the eaſt ſide of the great Iland Arren, called Lamlaſh, or Lam Ile, cleane alſo round about, there you may ſaile round about it, and ankor under it for all windes in ten, twelue, or thirteen fathom, to wit, within it, betwixt the Iland and the great Iland of Arren. Lamme Ile

North and by eaſt and northnortheaſt two great leagues from Lamme Ile, lyeth an Iland by the poynt of the maine land called Commer Ile; on the eaſt ſide of it betwixt the Iland and the maine land, you may ſaile through into a faire Commer-Ile. Bay of Commer Ile.

Bay,

bay, where men are land-lockt for all winds, and from thence may saile forth unto Dunbrittaine, or into the river of Glaskow. The foresayd Iland Commer-Ile lyeth from the Iland Elzee, about north and by east. For knowledge of this Iland, when men come off from Elzee, or from the southwardes towards this Iland, men shall see a great castle on the east side of the maine about a great league to the southwardes of Commer-Ile, and also a little castle, a good wayes to the northwardes, close vpon the water side, that standeth right to the southwardes of the Iland Commer-Ile, or the sound that lyeth there in to the eastwardes of it; upon the same Iland standeth also a litle castle close to the water side. Runne in betwixt the Iland and the maine land, about northnortheast in, and leaue the Iland a great cables length on the larbord side, and the main land on the starbord side you must shun more, because of a great ledge that lyeth off from it towardes the Iland, and somewhat more northerly. Having gotten cleare of the end of this ledge, runne then right towardes the maine land into the bay, or sound, and anckor there in ten fathom, right against a stone house with an orchard thereby, it shall be then a stearne your ship about seven fathom deepe, and there morre your ship well.

To saile frō Commer Ile to Glaskow.

For to saile out of the Sound of Commer-Ile, towardes Glaskow, goe first northwest and by north vnto by the poynt of the Iland, that is, to the westwardes of you, and then north alongst by it, then by litle & litle more easterly, at length northeast, runne so all alongst by the easterland, without leaving of it, you shall not faile to come to the Sound of Glaskow. Coming by the point runne close about by it, first eastnortheast, east, and east and by south, at last eastsoutheast, all alongst by the souther shore, you shall then see a castle somewhat a head upon the souther land, close upon the water side, with two tuffs of trees upon the high land right eastsoutheast from the castle; keepe that foresayd castle betweene the two tuffes of trees, and saile in thereupon, so shal you run right alongst the deepest of the Creeke, there is at high water fiue fathom, and at low wather three fathom. From the north shore lyeth off a great showld, which lyeth over the Sound more then two third parts from the norther shore; towardes the souther shore it falleth dry at the lowest water, therfore men must shun the norther shore, and runne alongst by the souther shore. There standeth a white castle upon the south shore, right against that begin the foresayd sands. In the creek it is soft ground, but towards the sand the ground is hard, therfore when you feele by your lead that it is somewhat hard, that is a token that you come too neere the shoulds, saile then so forth vpwards to Dunbrittaine, there lyeth a little Iland on the south shore, which is at lowe water fast to the land, when you shall bee past it about two Cables length, then anckor there in fiue fathom at high water.

A south and by west moone maketh there the highest water.

Of the tydes and course of the streames.

ON the coast of Ireland from the Southrocke and Northrocke vnto the Coplands Iles, a southsourheast and northnorthwest moone maketh full sea. But to the northwards of it a south east moone.

On the Ilands of the Raghleens and Skires Portrush an eastsoutheast and westnorthwest moone.

The flood cometh there out of the west, and falleth through betwixt Ireland and Scotland: from the Cape Cantir to the Mull of Galloway, southsoutheast, unto the Iland Man, there the floods out of the south and north doe meet one the other. The ebbe contrariwise falleth alongst the coast northnorthwest betwixt Ireland and Scotland to the westwards unto the Ocean sea.

At Eglistoun in the Sound of Glaskow, a southwest moone maketh full sea.

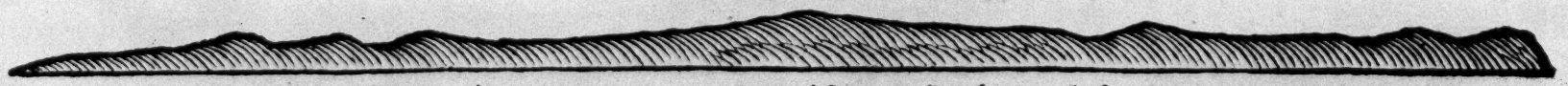
Courses and Distances.

FRom the Northrock and Southrock unto the Coplands Iles n.n.w. 6 leagues

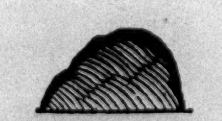
From the Coplands Iles to the north poynt of Knockfergus northwest somewhat northerly — — 3 or 4 leagues.

One league to the northwardes lyeth the haven of Oldefliet. From Oldefliet to the Raghleens within the Maydes, through northnorthwest — — 6 or 7 leagues.

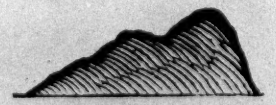
From the Raghleens to Skires Portrush westsouthwest — 6 or 7 leagues.



Thus ſheweth the poynt of Scotland over againſt the Bay of Knockfergus, called the Mull of Galloway, when men ſaile alongſt by it, a league without the land, and that the northermoſt and the low poynt is northeaſt from you, and the ſouthermoſt ſoutheaſt from you. Vnder the north poynt it is on both ſides good ankoring in ten or twelue fathom, for ſoutherly and eaſterly windes.

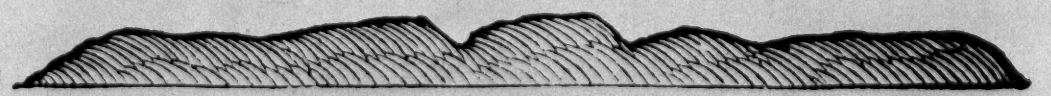


The Iland Elzee in the great bay of Dunbrittaine ſheweth it ſelfe thus.



The Iland Lamblaſh, or Lam Ile on the eaſt ſide of the Iland Arren ſheweth it ſelfe thus, being 2 leagues off from it.

The Iland Commer Ile lying before the ſound of Dunbrittaine, or Glaſkow, ſheweth it ſelfe thus.



Thus ſheweth Cape Cantyr, when it is from you northweſt and by weſt about ſeuen or eight leagues.

CHAP. V.

The Coastes of Vlster, from Banthaven vnto the Cape of Tellingh.

Loughfoile.

TWO leagues westnorthwest from Banthaven, or west and by north from Skires Portrush, lyeth the haven of Loughfoile, before it lieth a great plate of sand called the Touns, which lyeth from the west poynt of the haven, a great wayes to the northwardes off from the shore, when the winde is out of the sea, it breaketh very much upon it, with small shipps that draw litle water, men may saile into Loughfoile haven at high water to the southwardes of the Touns, betwixt the Touns and the souther poynt, called Magillions poynt; but it is there very vneven, and at full sea there commeth no more then eight foote water, but allongst to the westwards of the Touns, it is very deepe, men may sound about the Touns on the off-side in foure fathom.

Touns.

For to finde the channell that lyeth in to the vvestwardes of the Touns, (comming from the east, or allongst by the Touns) you must looke out for a little sandy Bay, that lyeth on the west side, even vvithin the north poynt of the river under the high land; bring it so, that you may see it open of the foresayd north point, and saile in thereupon, untill you come by the land, and then runne in alongst by it southwest untill you come right against Greencastle. If you come from the vvest, or the north, you may boldly vvithout feare runne alongst the shore, and about the poynt upon your lead, vvithout comming neere the Touns, you may see any thing that might doe you hurt, comming by Greenecastle, there may you anckor so, that you may see Withcastle vvithout the point of Green-castle, there you may lye within the Touns, sheltred for windes out of the sea.

For to sayle up from Greene-castle, you must runne up alongst by the vvest shoare, by your lead, and shunne the little sandes that lye here and there alongst that side, vntill you come past With-castle, right against the three trees, there is the ordinarie road.

Road in Loughfoile.

Betwixt Greencastle and Withcastle neerest unto Greencastle goeth a Creeke or Slencke through the groundes, unto the easter shore, which is as deepe or deeper then the right fareway unto Withcastle. When men come off from Greencastle, they must take good heed not to go farre off from the wester shore, lest they fall into that creeke.

How men shall sayle from the foresayd roade forth up unto the Towne Derry, they may perceiue or marke by the card.

From Loughfoile haven unto the Ilands Enesterhull (by some called Monsterhull) the course is northwest foure or five leagues, these are small black Ilands or rockes, not very high aboue water, and lye a little off the northermost poynt of Ireland, called Enistone, a high plaine land, and very good to know, for him that hath once seen it. Betwixt the Ilands and the poynt men may saile through, but not vvithout great danger for them that are not very vvell acquainted with it, because of much fowle ground and showlds that lye betwixt them both. Vnder the foresaid poynt Enistone, on the vvest side, men may ankor for easterly vvindes, or els to stoppe the tyde.

Ilands Enesterhull.

From the Ilands Enerstehull unto Lough-Swilly, of some called Lockfillie, the course is southwest five leagues, that is a faire haven. For to saile in there, men must shunne the west side, and goe in alongst by the easter shore: The land about Lough Swilly is the highest land of the whole north coast of Ireland, and thereby it is also very good to know, for those that (comming out of the north) do fal with the land therabouts.

Lough-Swilly.

Foure or five leagues westsouthwest, or somwhat westerly, lyeth a large broad haven, called Sheepeshaven, but it is at some places fowle ground, within it men may lye landlock for all winds. The west poynt lyeth out, called Hornehead, or cape de Horne, upon it is a hill with two hommockes, to see to, like two hornes and thereafter the point is named.

Sheepeshaven.

Hornhead.

Cape de Horne.

At the west side of this poynt, men may ride, and anckor within the rockes for easterly windes. Betwixt Lough Swilly and Sheepeshaven lyeth also a Bay, vvhere men may anckor, but the ground is not very cleane, and right against it in the offing, halfe a league from the land, lyeth a ledge of rockes, which at high water are under, and at low water lye aboue water, men may (for need) goe through betwixt it and the land, but without it is best and surest.

Westnorthwest about two leagues from C. de Horne, or Hornhead, lyeth the Iland Tore, to the southwardes of it lye three Ilands, called the Ilands of Baleneese, men may saile through to the southwardes of Tore Iland, to wit, betwixt Ile Tore, and the Ilands of Baleneese, and also within the rockes.

Tore Ile.

Ilands Baleneese.

From the Iland Tore to the Iles of Aran, the course is southwest and by south 6 or 7 leagues, betwixt them both, not far from the Iland Aran, lye some high rocks, called the Staggs of Aran. Alongst all that coast betwixt Hornhead and the Ilands of Aran, is good ankor ground all over.

Ilands of Aran.

Staggs of Aran.

For to come to anckor under the Ilands of Aran comming out of the North, runne alongst by

Duytſche mylen 15 in een graedt

Spaenſche mylen 17½ in een graedt

Eng: en Fr. mylen 20 in een graedt

NOORD

VAN YE

Colran Caſt:

Banshawen

De reed

Magillons Point

Derry

Steen

Boom ofte Tree

Kilmor

3 Boomen ofte Trees

Toome

Grenkaſtel

Lougfoyl haven

Coldaghaven Oons gat

Tyrhaven

Emyſthon

Eylanden van Eneſterhul

Rollkaſtel

Buncranagh

Vugle Sandbay

Robben eylandt

Ramolle

Lough Swilly haven

De Noord-Cust van Yerlandt tusschen Bandthaven en C. de Telling

D V S T

E L A N D T

Tellinghed al: C. de Tellin

I. Raiglene borne

Loerus

Kastel

Kladij

I. Aran

Staete van Aran

Hoornhed

C. de Hoorn

Baleneese eylanden

I. Torre

Dungal
Bulstoun
Dungalhaven
Balashaven
Exverhaye
Castel Morgsugn
S Lans point
Kilbeg
Bondroes
Melchaven
Slego
Endrigo
C O N
Tellinha ven
Tellinghed
C. Tellin
I. Rauglencborne
Moye ofte Muijn
Rysteain
Stakes van Brodhavē
Brod: haven

Duytſche mylen 15 in een graedt.

Spaenſche mylē 17½ in een graed

Eng: en Fr: mylē 20 in een graedt

De West-Cust van Yerlandt tuſschen C. Tellin en Slijnehooft

N A V G H

Bresel

Bores

Fachon

Schiermod

Don Patrice hil

Boon owen

Schynes ofte Slynehead

Clere

Boche

Horshe

Slijnehooft

East Akil

Akkelhid

Eneskie

Blacrockloste de Moon

80

by that great Iland, leaving it on the ſtarboord ſide, vntill you be within it: goe then towardes the ſouthweſt, and anckor on the ſoutheaſt ſide, there is the roade. Men may alſo anckor in the Ilands over againſt it towardes the maine, in divers places, and lye land-lockt for all windes.

Vpon the northweſt point of Ireland, a good wayes landwardes in, lyeth a high hill of faſhion almoſt like a Suger-loafe, which is ſeen in cleare weather before any other land, at leaſt 9 leagues at ſea: when that hill lyeth eaſt and by ſouth from you, and then ſaile in right with it, you ſhall not miſſe to fall right with the great Iland Aran.

Cape de Tellin. Telling-head.

From the Iland Aran vnto the poynt Tellinghead, called by the Iriſh, C. de Telling, or Tellin, the courſe is ſouthſouthweſt eight or nine leagues. Three or foure leagues to the northwardes of C. de Telling, lyeth an Iland called Raiglene borne.

Of the tydes and courſe of the ſtreames.

IN the haven of Loughfoil an eaſt & by ſouth, and weſt and by north moone maketh full ſea. The flood commeth there out of the weſt and northweſt.

At the Ilands Eneſterhull, and in Shepeſhaven an eaſt and weſt moon maketh full ſea. The flood commeth there out of the weſt.

Courſes and Diſtances.

FRom Loughfoil to the Ilands Eneſterhull northweſt 4 or 5 leagues.
From Eneſterhull to Lough Swillie ſouthweſt — — 5 leagues.
From Lough Swillie to Sheepſhaven weſtſouthweſt weſterly 4 or 5 leagues.
From C. de Horne, or Hornehead, to the Iland Tore weſtnorthweſt 2 leagues.
From the Iland Tore to the Iles of Aran ſouthweſt and by ſouth 6 or 7 leagues.
From the Ilands of Aran vnto Tellinghead ſouthſouthweſt 8 or 9 leagues.

Heights.

THE Ilands of Eneſterhull at the northermoſt poynt of Ireland, lyeth in 55 degrees and 10 or 12 mintues.

CHAP. VI.

The VVeſt coaſt of Ireland, betvvixt C. de Telling and Slynſhead.

AT the Cape Telling lyeth a litle Iland halfe a league from land, men may ſaile through betwixt the Iland and the cape, boldly without any danger.

To the ſouthwards of C. de Telling, to wit, betwixt the Cape and the Staggs of Broadhaven, lyeth the land with a great baye, wherein lye many good havens, as Tellinghaven, Kilbegh, Dungall, Ballaſhaven, Slego, Endrigo, and Moye.

Kilbegh.

From the Cape of Telling unto Kilbegh lyeth the coaſt e.ſ.e. about foure leagues: betwixt both, about one league & a halfe from the cape, lieth Telling haven, a round bay with good ſandy ground, there may about 30 ſhips lye, weſt and ſouthweſt windes do blow there open in, for all other windes men are there land-lockt.

Kilbegh, or Kalebeg is alſo a faire round bay, but it is very narrow at the comming in of it: when men are a litle from the ſhore, it ſeemeth to be all cloſe without any opening. About halfe a league to the weſtwardes of this bay, a quarter of a league from the land, lyeth a little Iland which is very low and plaine, at both ends going plain downe, that is a good mark to know this foreſaid bay, men may alſo ſaile through betwixt the Iland & the maine, if they will. When you come out of the weſt, and are paſſed that Iland, then goe neere the ſhore which is clean and cleare, and go freely cloſe aboord of it, until you ſhall ſee this bay open, and then ſaile boldly in without any feare, betwixt the two ſhores there is nothing (neither in the going in, neither within in the bay) that can hurt you, if you doe not ſaile vpon the ſhore. When you ſhall be come in, anckor where you pleaſe in fiue, ſixe, ſeven, or eight fathom, ſo ſhowld or ſo deepas you will, on the north ſide within the bay ſtands a litle caſtle.

Mackſwinſ bay.

About a litle league to the eaſtwards lyeth another bay within ſome rockes, called Mackſwynſbay, but it is not to goe in except men bee very well acquainted, they muſt goe betwixt the rockes in until they be gotten in, there they may ſaue a ſhip without cable or ankor.

S. Iohns point.

A great league to the ſouthwards of Kilbegh, lyeth a long lying-out poynt called Saint Iohns poynt. Right weſt from that poynt, a quarter or a litle halfe league, lyeth a great rock under water, whereupon the ſea breaketh with great noiſe. Betwixt that rock & the point of S. Iohns point, men may ſaile boldly through, it is there cleane and cleare.

Dungall haven.

About two great leagues to the eaſtwardes of the foreſaid point S. Iohns point, lieth the haven of Dungall, in to the ſouthwards. For to ſaile in there you muſt firſt ſhun the eaſter ſhore, which is very fowle with drye plates and rockes. When you are come right againſt a little Caſtle that

ſtandeth on the north ſide, right againſt it lyeth off a little riffe from the ſhore, that you muſt avoyd alſo. And when you are come about the point of that riffe, you muſt go over again to the north ſide, for the ſouth ſide is there flat and ſhowld. Betwixt S. Iohns point and Dungall haven alongſt the coaſt is all over good anckor ground.

Moye. The haven of Moy hath at the comming in a broad bay, in it lie ſome rocks. For to ſail in there you muſt leaue them all on the weſt ſide, that is, on the ſtarbord ſide, and run towards a little ſandy Iland, that hath at the north end a litle riffe, you muſt goe in to the weſtwards of it, and leaue that Iland on the larbord ſide. Even within that foreſayd Iland, lyeth another litle round green Iland, that muſt bee left on the ſtarbord ſide, ſo ſoon as you ſhall be right againſt it, you muſt let fall your ankor, for a little further it is ſhowld & hard ſandy ground, the greateſt ankor muſt be brought towards that foreſaid long ſmall Iland, & the ſmall ankor towards the litle green Iland, it falleth there at low water alwayes dry. If you wil goe from thence before the towne Moye, you muſt light your ſhip to eight foote, for to come through betwixt the long ſmall Iland, and the ſouth grounds, there is at high water with an ordinary tyde no more then 9 foot water; beeing come over that neck, you ſhall come into a poole before the town Moy, there you may tide afloat at low water. In the road againſt the Iland it is 15 or 16 foot deepe.

Staggs of Broadhavē The Staggs of Broad haven are rockes that lye to the northwards a league or a league and halfe a ſeabord of the point, to the northwardes of Broadhaven.

Broadhaven lyeth in ſouth and by weſt, in the ſound lye three or foure rocks, theſe muſt be left on the larbord ſide, and run in there alongſt to the weſtwards, untill you come within the haven.

A great league to the weſtwards of Broadhaven lyeth an outer point ſouthweſt from the Staggs.

Blackrock. From thence lieth the coaſt alongſt to Blackrock ſ. ſ. w. Blackrock is a great high black rock with more other rocks by it, lyeth from the foreſayd point ſ. ſ. w. diſtant about 6 leagues, and about a league northweſt from the out point Ackelhead.

Ackelhead Ackelhead is a very high poynt, ſheweth it ſelfe a farre off like an Iland with a great ſaddle, thereby it is good to be known. Within this point lye alſo two exceeding high hills, which together with the poynt men ſhall ſee firſt at ſea before any other part of the land, ſo that the poynt doth ſhew it ſelfe firſt like three Ilands. Men may ſaile through betwixt Ackelhead & Blackrock; comming from the ſouthwards men do leaue Ackelhead on ſtarbord, and Blackrock (with the rocks thereby a ſeabord) on larbord, and the courſe lyeth through betwixt them both n. n. e. and north and by eaſt, unto the poynt of Broadhaven, it is there large and wide.

To the northwardes and to the eaſtwardes of Ackelhead, lye divers havens, where is good riding, a little to the northwardes of Ackelhead, you may run in to the weſtwardes, betwixt the low land to the northwardes on the larbord ſide, and the high land of Ackelhead on the ſtarbord ſide, a great wayes in, and ankor in 7 & 8 fathom, landlockt for all windes, and from thence may come out againe to the northwardes, or els may come out into the ſea againe to the ſouthwardes round about the land of Ackelhead.

From Ackelhead to Slynſhead (by the ſea-faring men called Twelue-pence, becauſe the land doth ſhew it ſelfe in twelue round hommockes) the courſe is ſouth & by eaſt ten leagues, betwixt them both lye three Ilands before a great baye, the northermoſt or next to Ackelhead is called Cleere, this hath a high hill on the north end that is very ſteepe, and at the ſouth end it is flat going downe. The ſecond or middlemoſt is called Boche; within it is a road, for thoſe that are bound to the ſouthwardes, where men may ankor in foure fathom: the ſouthermoſt is called the Horſe. Slynſhead Twelue-pence.

Betwixt Ackelhead and Twelue-pence lyeth within in the land, a very high hill like a Sugerloafe, called S. Patrickes hill, or by ſome Don Patrix, that may be ſeen farre at ſea, and ſhall be ſeen long, altering it ſelfe by the cliffe land, as men ſaile alongſt the coaſt to the northwardes, or to the ſouthwardes. Patrickes hill.

Of the tydes, and courſe of the ſtreames.

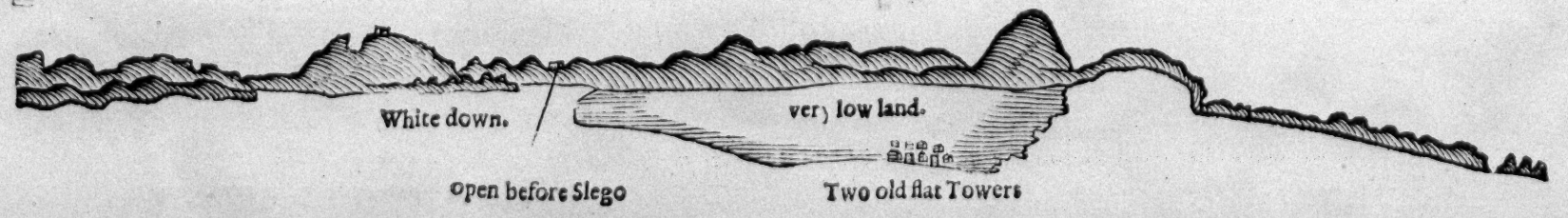
IN theſe foreſaid havens and roades an eaſt-northeaſt and weſtſouthweſt moone maketh a full ſea. In the offing a ſeabord a ſouthweſt and northeaſt moone.

Courſes and Diſtances.

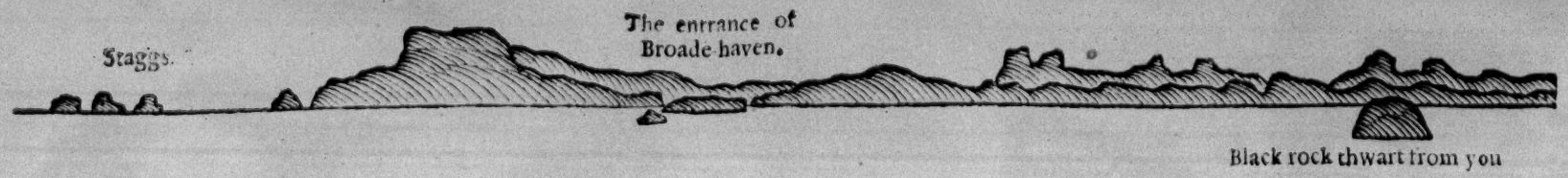
FRom C. de Tellin or Telling head to Kilbegh eaſtſoutheaſt 4 leagues.
From C. de Tellin to the Staggs of Broadhaven ſouthweſt 11 leagues.
From the poynt of Broadhaven to Blackrocke ſouthſouthweſt. 6 leagues
From Blackrock to Ackelhead ſoutheaſt 1 league
From Ackelhead to Slynſhead ſouth and by eaſt 10 leagues,
From Blackrock to Rokoll north and by weſt 60 leagues.

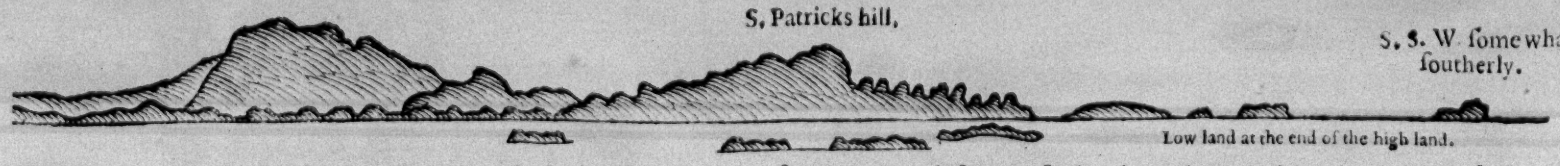
Howe theſe lands doe ſhewe themſelues at ſea.

Theſe two figures belong at the A A one to the other, and ſhew the forme or likeneſſe of the land betwixt Kilbegh and Slego.



Thus ſheweth the land to the eaſtwardes of the Staggs of Broadhaven towardes Moye and Slego.





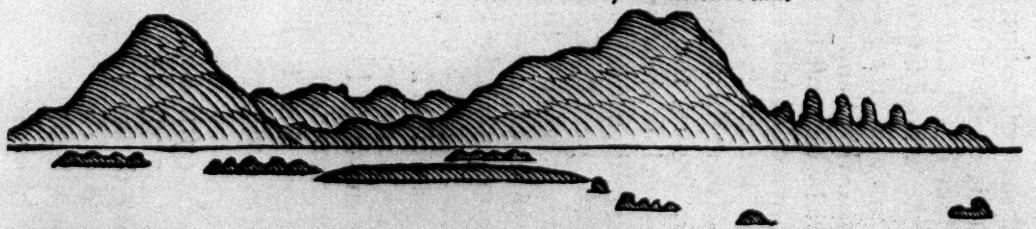
The land to the northwardes of Blackrock as farre as the Staggs, and then to the southwards alongst past S. Patricks hill, sheweth as in these two figures is described, when men are thwart of Blackrock.

Thus sheweth the land betwixt Blackrock and Ackelhead when it is east from you, when you come more to the northwards, these high hils doe alter also wider one out of the other.

The poynt of Blackrock sheweth thus when you are to the northwards of it.

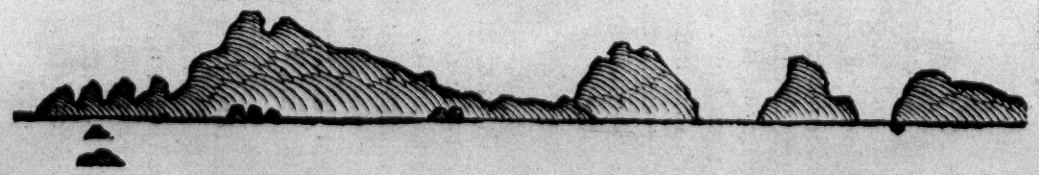
Thus ſheweth the poynt of Blackrock when men are to the ſouthwards of it, then they ſee a ſharpe rock over the poynt, like as it were a ſpire ſteeple, but it is a high ſharpe rock lying at the north ſide.

Don Patrickes, or Patrickes hill.

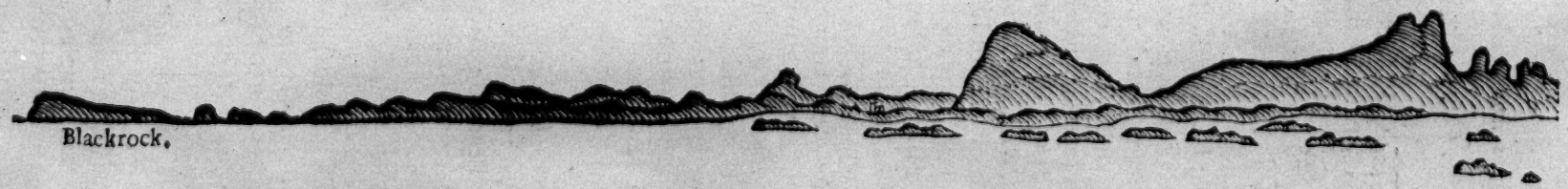


Thus ſheweth S. Patrickes hill when it is ſoutheaſt and by ſouth from you, being not farre from land, at the north ſide of it lye ſome little Ilands and rockes.

S. Patricks hill.



S. Patrickes Hill.



Blackrock.

Thus ſheweth the ſecond poynt to the northwardes of Blackrock, lying in the height of 54 degrees and a halfe.

Betwixt the C. of Telling, and Slynſhead.

CHAP. VII.

The Coaſtes and Havens betvvixt Slynſhead and the Blaſkeys.

FROM Slynſhead, or Twelue-pence, vnto the Sound of S. Gregories, before the Bay of Galloway, the courſe is ſoutheaſt nine leagues.

Before the Bay of Galloway lye three great Ilands, called the Ilands of Aron, the northermoſt is the greateſt, the chanell betwixt the northermoſt and the middlemoſt, is called the ſound of S. Gregorie, which is on both ſides cleane without any fowle ground, ſo that men may turne in to and againe from the one Iland to the other, without feare of taking any hurt. The north ſide of the middlemoſt Iland is nothing elſe but faire ſteepe rockes: when you are come within the Ilands, you muſt ſhun the midlemoſt, becauſe of a little riffe that lyeth off it.

Ilands of Aron.

S. Gregories ſound.

Men may alſo ſaile to the northwardes of the the northermoſt Iland, into the great Bay of Galloway, likewiſe alſo to the ſouthwards of the ſouthermoſt, to wit, through betwixt the ſouthermoſt Iland, and the maine land, but that Iland is fowle at the ſouth end of it, and therefore you muſt run in alongſt cloſe by the ſouth ſhore, or at leaſt leaue two third parts of the channell towardes the Iland, as well in ſailing in as ſailing out.

Somewhat within the Ilands, on the ſouth ſide, lyeth a high black poynt, called Blackhead, you muſt beare in to it, and alongſt by it in, whether you come in at the ſouther channell, or through S. Gregories Sound, or els in at the norther channell, for the north ſide of the Baye is fowle and rocky. About two great leagues northeaſt from Blackhead, lyeth an Iland called Motton-Ile, under it on the eaſt ſide you muſt anckor in a poole in fiue or ſixe fathom.

Blackhead.

Motton Ile.

You cannot ſaile further up to the northwardes into the river with ſhips, but onely with boats. A northeaſt and ſouthweſt moon maketh there full ſea, and it floweth there ſo ſtrong in the bay, that the rockes which at low water are aboue water, at high water you may ſaile over them: at low water the ſpring tydes, the grounds fal dry w. ſ. w. frō Motton-Ile, a great league and halfe off, moſt all rocky and fowle ground.

When you ſaile from Blackhead towardes Motton-Iland, you muſt take heed of the north ſide, and edge over moſt towards the ſouth ſide. About halfe wayes betwixt them both, lyeth a plate or ledge neereſt the north ſide, you muſt go in alongſt by it to the ſouthwardes.

Lupiſhead

From the Bay of Galloway to Lupiſhead, the north point of the haven of Limbrick, the courſe is ſouthſouthweſt nine or ten leagues. About halfe wayes betwixt them both, lyeth a little Iland that is fowle round about with ledges of rockes that lye off to ſeawardes at leaſt a league and halfe a ſeabord the land.

To the ſouthwards of the point Lupiſhead goeth in the haven of Limbrick. Three or foure leagues eaſtnortheaſt within the foreſayd poynt, lyeth an Iland called Seatrick, you muſt ſayle alongſt without it to the ſouthwardes, and leaue it on the larbord ſide in ſailing up. At the eaſt ſide of that Iland is a good road. About halfe wayes betwixt that Iland and Lupiſhead, lyeth a ſhowld which you muſt ſhun, and ſaile alongſt to the ſouthwards of it. From the Iland Seatrick vnto Limbricke, are more twelue or thirteene leagues, firſt from thence to the Iland Quoyne foure or fiue leagues, there are two low Ilands, you muſt ſaile cloſe alongſt to the northwardes of them: from thence eaſtnortheaſt unto a great rock called the great Beefe, and then ſoutheaſt unto another great rock called the litle Beefe.

Haven of Limbrick.

Seatrick.

The great and little Beef rocks.

When you are come before the towne in the haven, you muſt make faſt on the Caſtle with three or foure cables, for there goeth a very ſtrong tyde as well of flood as of ebbe. An eaſtnortheaſt moone maketh there full ſea.

From the haven of Limbrick to the haven of Smerrick the courſe is ſouthweſt ſeven or eight leagues, betwixt them both lyeth the coaſt with a great bay wherein lye ſome litle Ilands called the Hoggs.

A litle to the eaſtwardes of Smerrick lyeth Sinbrandon hill, a very high hill, which lyeth in height aboue all other lands thereabouts, they that come out of the ſea from the weſtwardes, ſhall ſee that hill firſt before any other land, and thereby eaſily know it: men may ſee it at ſea in the offing, 12, 14, and ſometimes 16 leagues off, according as the weather is cleare.

Foure leagues weſtſouthweſt from Smerrick, a litle off from the land, lye foure or fiue Ilands, being high round hilles and rockes called the Blaſkeyes, with ſome other rocks and litle Ilands about them. The Sound betwixt them and the maine land, is called the Sound of Blaſkeys, lyeth through neereſt northweſt and ſoutheaſt. He that is bound to the northwardes, may anckor at the ſouth ſide before the Sound for weſterly and northerly windes, and not be in-bayed upon no lee ſhore: For if the winde ſhift eaſterly, hee may either goe through the Sound, or els goe about a ſeabord the Blaſkeys. If the wind ſhift weſterly or ſoutherly, he may run through the Sound, and further his voyage. There runneth through a very ſtrong tyde, as well of the flood as of the ebbe, which muſt be conſidered.

of

West-Cust van Yerlandt tusschen Slynhoost en de Blasques

Castel Voorstadt

Galloway

Mottins yste

Blac Hed

Duytsche mylen 15 in een gra.

Spaens: myl: 17½ in een gr:

Eng. en Fr: myl. 20 in een gr:

Dorthoost

Liskamer

Caroleske

S. Gregorius Sond

Maes

Kronekte

S. Kardus

Port Nassadoy

Boon owen

Slynehed al Slynhoost

't Vervolgh_
vande Rievier
van Limrick
vant Eijlandt
Qowine tot
de Stadt

I. Quoine
Lonchol
Lymerijck
Borrath
Clare
I. Quoine
Lonchol
Seatrix
Can Sanan
Donbeg
Dommor
Kilerdan
Lupis hooft
Hogs
Brandon
hil
Drie Susters
Ventre
C. Sibil
Sond van Blasques
Blasques
Rocken

Of the tydes.

IN all theſe havens an e.n.e. and w.ſ.w. moone maketh full ſea; But in the offing a northeaſt and ſouthweſt moone.

Courſes and Diſtances.

FRom Slynſhead unto the bay of Galloway, ſoutheaſt 9 leagues.

From the Bay of Galloway to Lupiſhead the north point of Limbrik haven ſ.ſ.w. 9 or 10 leag.

From Lupiſhead to Smerrick ſ.w. 7 or 8. leag.

From Smerick to the Blaſkeys w.ſ.w. 4 leagues

From Slynſhead to Sinbrandon hill ſouth and by weſt 22 leagues.

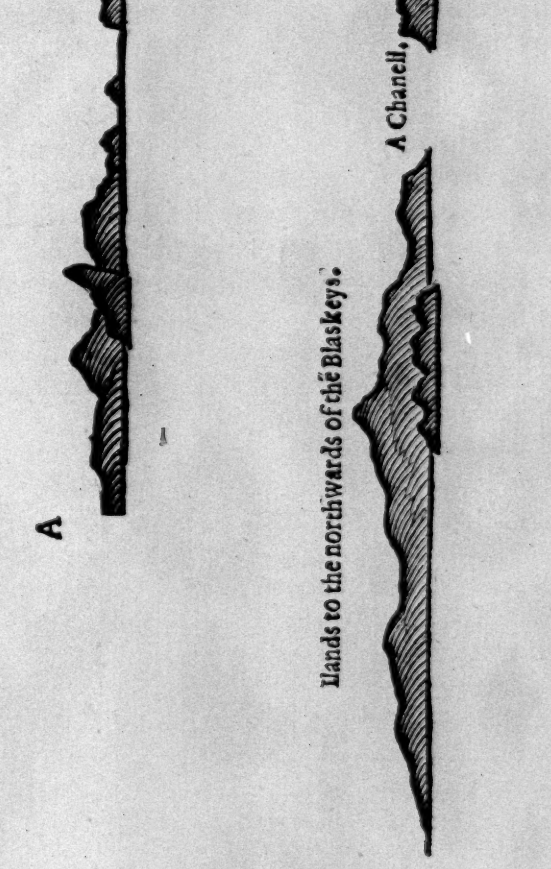
From the bay of Galloway to the Blaskeys, ſouthweſt and by ſouth. 23 leagues.

Heights.

The river of Galloway lyeth in 53 deg. 10 min.

How theſe lands do ſhew themſelues at ſea.

The land of C. Kerry, or Sinbrandon hill (by ſome called Devills hill) unto the Blaſkeys, lying northeaſt and by eaſt five or ſixe leagues, ſheweth as is pictured out in theſe two figures, when the foreſayd hill of Sinbrandon is eaſtſoutheaſt from you three or foure leagues.



CHAP. VIII.

The Coastes of Munster betvvixt the Blaskeys and Mizanhead.

Skellocks. SEVEN or eight leagues to the southwards of the Blaskeys, lye three great rocks called the Skellockes, the eastermost about a league, and the westermost two great leagues a seaboord the land, when you come from the southwardes and see them first, they shew like sailes of Shippes. Betwixt the Skellokes & the Blaskeys goeth in a great broad Bay deep into the land, called Dingle-bay, with divers havens in it.

Dingle-bay.

About a league and half from the Sound of Blaskeys lyeth a haven called Ventrie, a great league to the eastwardes of it another called Dingle, or Dingle Couch, it lieth north and by west in, at the west poynt of it lyeth a rocke called the Crow, which is clean round about, so that men may sayle round about it on both sides, without taking any hurt, at high water with spring tyde, it floweth even under water. This haven of Dingle and the Skellockes, lye northeast and by north, and southwest and by south distant eight leagues.

The Crow

Northeast from the Skellockes, southeast from the Sound of Blaskeys, and south and by east from the Ventrie, lyeth a haven at the east end of the Iland Valentia, called Begenney, which lyeth eastsoutheast in, you must giue the east poynt of the Iland a Birth off, because it is fowle, and lyeth a good wayes off: there lyeth also a sunken rock on the Iland side, which you must take heed of when you are come within the entry of the haven, you must goe east and by north unto the road, which is right against a red cliffe that lyeth on the southside.

Begenney Haven.

The Skellockes and the Cape Dorsey lye northwest & southeast seven or eight leagues a sunder: betwixt them both goeth in also a great broad Sound, northeast in, wherein lye many Ilands, havens, and roads.

C. Dorsey. C. Dorsey is an Iland within which men sayle and ride under. For to goe in there from the southwardes, you must giue the east side a birth, that is, the side of the maine land, which is fowle, and run in alongst by the side of the Iland, until you be come within, and ankor there.

Bull, Cow, and Calfe rockes. Without the Cape Dorsey lye three great rocks, the outermost or the westermost is called the Bull, the middlemost is called the Cow, & the other the Calfe, they are clean round about, so that men may sail there through between them, with out feare of any danger, there is nothing that can hurt but men may see it.

About seven leagues eastsoutheast from C. Dorsey, lyeth the point Mizanhead, betwixt them both goeth in a great Bay or river deepe into the land (with divers havens and roades) called the Bantry. Mizanhead.

A great league to the northwards of Mizan-head, lyeth a poynt called the Three Castle-head, upon it stand three flat Towers, but men can hardly see them except they be neere the land. Also a great league more to the northwardes, lyeth a small poynt called Sheepshead. Betwixt these two poynts goeth in a great broad Bay caled Dounams Bay, there is nothing to doe nor to fetch, but it is a fit place to saue ships, and all over good ankor ground. Three Castles. Sheeps-head.

From Sheepshead to Beerhaven the course is north and by west, or somewhat westerly about two great leagues, it goeth in between an Iland on the east side, and the main land towardes C. Dorsey on the west side, it is about a great musket shot broad, the foresayd Iland on the east side is called the Iland of Beerhaven, and is about two leagues long. For to sail in there you must keep the midway, in the entry of the haven it is clean, without any fowle ground: after you be come in, there standeth on the larbord side a ruined castle, and a little further are two litle rivers, close one by the other, between these two litle rivers stand some Fisher-houses. Men may saile into the foresaid litle rivers, they are deepe enough, but commonly men doe ankor before them, or by that foresaid ruined castle, or els somwhat further in, it is all over good ankoring, and cleane ground, except right against the foresaid little rivers, lye some rocks about the middle of the channell, which at high water are under, and at low water lye aboue water, these onely must be shunned, but men may goe on either side of them. Somewhat further in the bay standeth another castle called Old-castle, from thence men may saile alongst to the northwards of the Iland Beerhaven, and come out to the eastwards, into Bantry. The Sound on the north side of the Iland is large, broad, and cleane, 13, 12, and 10 fathom deepe. The east point of the Iland is a sharpe point, and very fowle; there lyeth off a ledge of rockes, whereof some lye vnder water, and some aboue water at low water, but the side of the maine is cleare and cleane. In this entry lye also two great rocks high aboue water, but clean round about, men may run through between these rocks, or to the southwards, betwixt them and the foresayd ledge of rockes, or also to the north- Beerhaven. Road in Beerhaven Oldcastle.

De
Zuydweſt hoeck
van Yerlandt
tuſschen
de Blaſques en
Meſanhooft

I. Riſh

C. Minet

Dingle loch

Dingle Bay

Ventry
Caſtel
Caſtel

Sond van Blaſques

Duÿtſche mylen 15 in een graedt
Spaenſche mylē 17½ in een grae:
Engs: en Fr: mylē 20 in een graedt

Blaſques

Enis Clon

Enis Shroe

Racken

Valencia
Iland.

Baleſchel
logh

Middel Skyllingh

Great Schyllingh

Langerf.haven
Balgobben
I. Widdy
Aby
Clip als een Zeyl
Salmon lap
Loug Argrum
Bantrey
Kil mare
Cock head
Great Ile of the Englandt van Bierhaven
Borrule
Downames Bay
Schegge's hid
Out Castel
Bierhaven
Sermon
Vervallen Castel
Blachid
Drie Castelhid
Mesaubid
Sand Van Dorses
Dorses
Kalf
Koe
Bul

northwards alongſt betwixt them and the maine land, as well in coming in as in ſailing out, there is no danger more then men may ſee.

The Whiddy. From Beerhaven to the north point of the Iland Whiddy, lieth the Bantry e.n.e. and northeaſt & by eaſt 6 or 7 leagues: over againſt Beerhaven in the middeſt in the fare-way, it is deepe 40, 36, and 30 fathom, within the Iland, 15 and 16 fathom, but further in towardes the Iland Whiddy, it is againe 20, and 25 fathom deepe: men may ſaile round about the Iland Whiddy, (which is about a league long) but to the northwardes it is beſt.

For to ſaile in about to the northwardes, or to the eaſtwardes, men may go in cloſe by the north or eaſt point, but a little within the poynt, lyeth a little ledge of rockes, a little muſket ſhot off from the ſhore, which at high water lyes under, but at halfe ebbe beginneth to come aboue water: that onely is there to be ſhunned, being paſſed that, you may anckor all over. About that foreſayd point lye two ſmall Ilands, by the greater men may ſaile alongſt on both ſides of it, either within it or without it, vntill before a Gentlemans houſe which is white, upon the Iland Whiddy, and anckor there againſt it in 3, 4, or fiue fathom, ſo deepe or ſo ſhowld as men will, according as men deſire to ride neere or far from the ſhore, it is there all over clean ground.

For to ſaile in to the ſouthwards of the Whiddy. He that will ſaile in to the ſouth poynt of the Widdy, had need be very well acquainted, it is there to the ſouthwardes betweene the Widdy and the maine land, at moſt places fowle and ſtony. From the weſt ſide of the Whiddy, lye alſo ſome fowle ground and rocks, ſomewhat off the Iland to ſeawards, ſome aboue, and ſome under water.

The Abby. To the ſouthwards of the Whiddy upon the maine land, ſtandeth a Friery or Abbey, called by the Iriſh the Abbey, right againſt it is the common road, and it is very good ground in 4, 5, or 6 fathom, according as you ſhal ride farre or neere to the ſhore, to the northwardes lyeth a little Iland ſo low in the middeſt, that at a ſpring tide the ſea floweth over, and divideth it in two.

Balgobben A litle league to the eaſtwards of the Abbey lyeth a little towne upon a litle river called Balgobben, at high water men may goe up there with there boat, but at low water it falleth drye.

Langerf. A great league from the eaſt poynt of the Whiddy, weſtnorthweſt, lyeth a haven called Langerf, when you ſhall ſaile from the foreſayd poynt towardes it, you ſhall meete right in the fare-way, about halfe wayes over, a great rocke, which may be ſailed about on both ſides, but it is beſt on the off-ſide. The off-ſide is cleane and cleare, but on the inner-ſide lyeth ſome fowle ground. He that will ſaile through on the inner ſide, had need to be very well acquainted. The foreſayd haven of Langerf lyeth n. n. w. in: Even within it in the entrance on the ſtarboord ſide, lyeth ſome fowle ground, which at low water (the Spring tydes) may be ſeen drye, theſe muſt be ſhunned, or els it is there within all over good anckoring and good ground, there is no more danger, but men may ſee it.

When a man is neer the Iland Whiddy, about middeſt of the bay, hee cannot ſee the land without the Iland Beerhaven on the weſt ſide of the B y, becauſe it falleth away ſo alongſt to the weſtwardes.

Of the tydes.

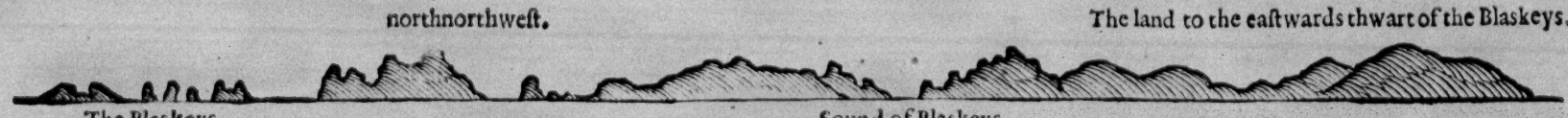
IN all theſe foreſayd havens maketh high water an e.n.e. and w. ſ.w. Moone, or a poynt later, according as they lye deep within the land.

But a ſea-boord the coaſt in the offing, a northeaſt and ſouthweſt moone.

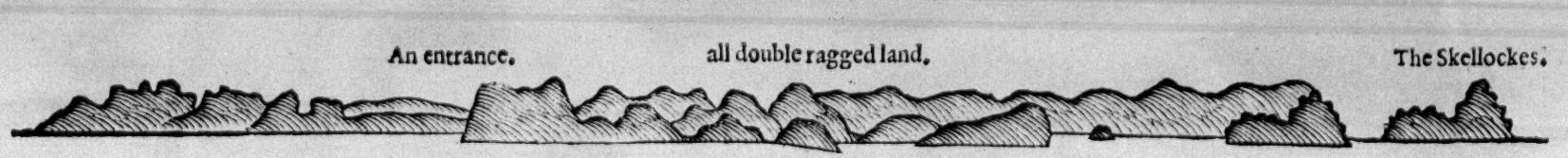
Courſes and Diſtances.

FRom the Sound of Blaſkeys vnto the Skellocks, the courſe is ſouth 7 leagues.
From Dingle haven unto the Skellockes, ſouthweſt and by ſouth 8 leagues.
From the Skellockes unto the Dorſeys, ſoutheaſt 7 or 8 leagues.
From the Dorſeys to Mizan-head eaſtſoutheaſt — — 7 or 8 leagues.
From Mizanhead to Sheepeſhead north, two great leagues.
From Sheepeſhead to Beerhaven the courſe is north and by weſt ſomewhat weſterly, ſcarce — 3 leagues.
From Mizanhead to Beerhaven north and by weſt 5 leagues.
From Beerhaven to the Iland Whiddy the courſe is e.n.e. and northeaſt & by eaſt 7 or 8 leagues
From the Dorſeys to Silly ſoutheaſt and by eaſt 56 leagues.
From the Dorſeys to Cape de Finiſterre is the courſe ſouth & by eaſt and ſouth 173 leagues.

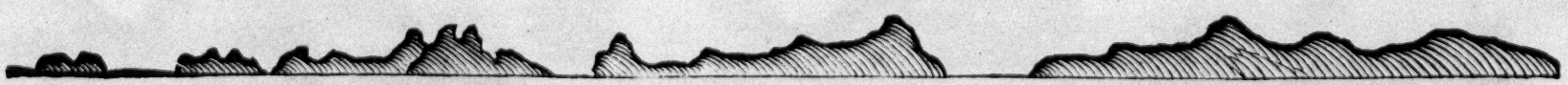
Howv theſe lands do ſhevv themſelues at ſea.



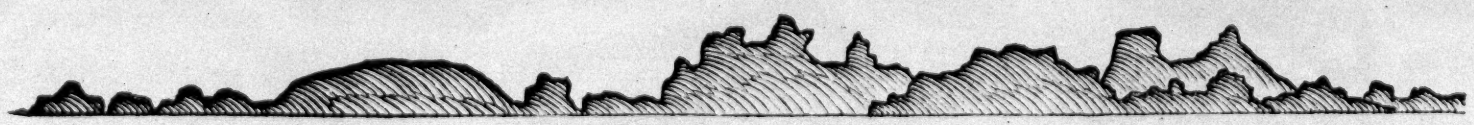
The Blaſkeyes and the land to the eaſtwards of them, doe ſhew themſelues thus when you ſaile from the Skellockes towards them.



Thus ſhew the Skellockes with the land to the eaſtwards or to the northwards of them, when you are ſomwhat to the northwards of them, and ſaile alongſt by them.



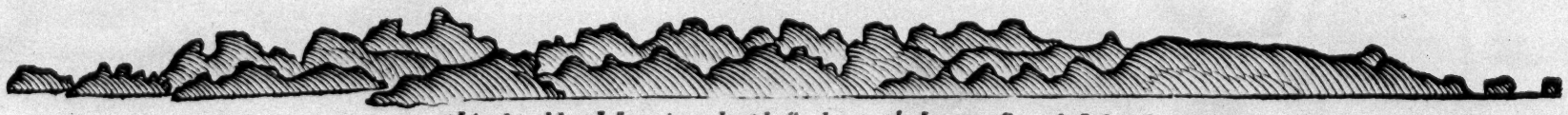
When you are by the Skellockes, then the Ilands lying to the northwards and to the eaſtwards of them ſhew themſelues thus.



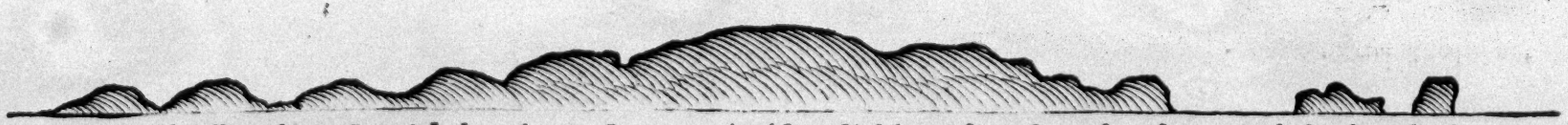
This is an entrance.

Theſe Ilands lye to the ſouthwards and to the eaſtwards of the Skellockes, the land from thence eaſtward towards the Dorſeys, is all high broken and very ragged land.

This

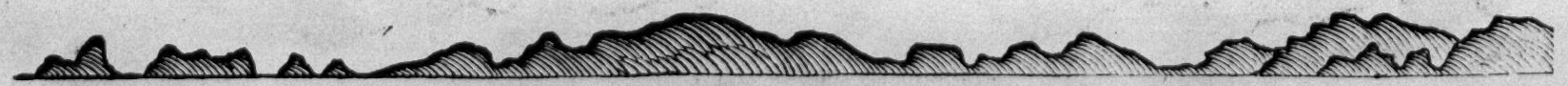


This Iland lyeth betwixt the Skellockes and the Dorseys close by the land.



Thus shew the Dorseys with the rockes, Bull, Kow, and Calfe, which lye without them when they are to the southwards of you.

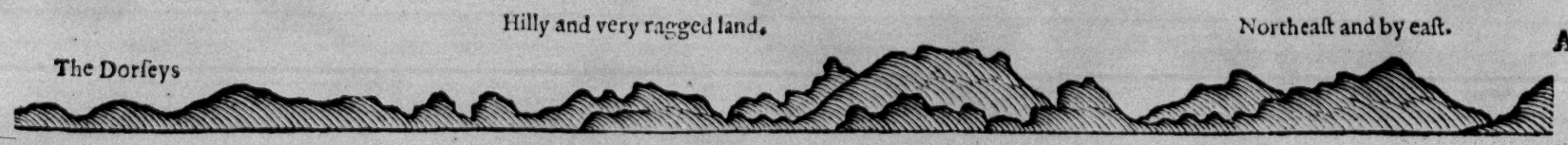
A



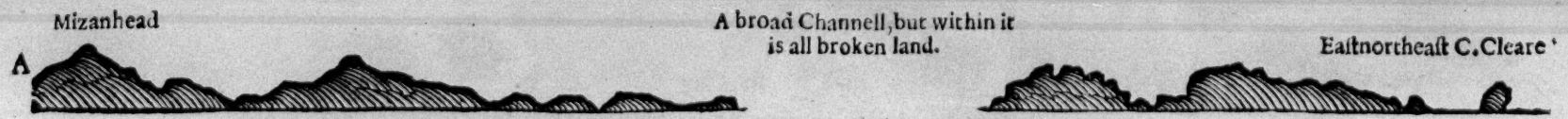
This and the figure following belong at the A A one to the other.

A B

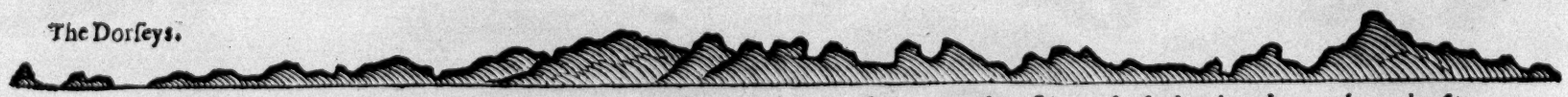
When you are to the eastwardes or to the southwades of the Dorseys, they shew as is pictured out in these two figures here before. The east end at B sheweth almost like Cape Cleare, being east from you, but it is a higher land.



Theſe two figures belong one to the other at the A A.



When that Cape Cleare is eaſtnortheaſt from you, and Mizanhead northeaſt and by eaſt, then is the land unto the Dorſeys in theſe formes, as is ſhewed in theſe two figures heere before



When that Mizanhead is northeaſt and by eaſt about two leagues from you, then ſheweth the land to the northwards of it towards the Dorſeys thus. And then may you alſo ſee the Iland of C. Cleare eaſt from you.

De Eÿlanden en Havenen ontrent de Cabo Clare bÿde zuÿdwesthoeck van Ierlandt.

Limcon
Penar
Lime
Cainor
Long
Bantrey
Drie Castel Hid
Mesanbed
haven
Croes
Fastne
20
40
50
70
80

Duytsche mylen 15 in een graedt
Spaensche mylen 17 ½ in een graedt
Eng. en Fr. mylen 20 in een graedt

Abastroa
Kilhoa
Cort
I. Spick
Rosbren
Dort
Mount
Corcuger
Castelhaven
Chapl
Rosbren
Core
Crook
Spain
Sken
Hare
Flats
Stakes
Baltimoer
Clere
Cloester
C. de Clare
Glendore
Rosse
Oldehed
De Cust tusschen Baltimoer en Oldhoost
Somzack
castelhaven
Crook
Chapel
Stakes
Baltimoer
83
Duytsche mijl. 15 in een graedt
Spaens. mijl. 17 1/2 in een graedt
Eng. en Fr. mijl. 20 in een gr.

CHAP. IX.

The coaſtes of Munſter betvvixt Mizanhead and the old head of Kinſale.

FRom Mizanhead unto C. Cleare the courſe is eaſt and by ſouth diſtant ſeven leagues. About three leagues within or to the eaſtwards of Mizanhead, northweſt from C. Cleare, lieth a haven called Crookhaven. He that commeth from the eaſt, and is bound in there, muſt runne alongſt by C. Cleare, up about it to the northwards, ſo farre untill he may ſee through into ſea to the northwardes of the Iland of C. Cleare, as through a hole, and ſet then his courſe weſtnorthweſt, keeping that foreſaid hole (to the northwards of C. Cleare) open, then he ſhall fall right with Crook-haven, which lyeth in w.ſ.w. And there he may anckor before the litle town in three fathom, and two fathom and a halfe. It was wont heretofore to be deeper there, but it is ſpoiled moſt by caſting of ballaſt, men may alſo ankor further out then before the towne, there it is deeper, and all over cleane ground.

Crooke-haven,

Two litle leagues weſt and by ſouth from C. Cleare, lyeth a high ſteepe rock alone in the ſea, called Faſtney, which ſheweth at firſt ſight like unto a ſaile, north & by weſt 3 or 4 leagues from this rock lyeth a haven called Schoolhaven.

Faſtney-rock.

Schoole-haven.

A litle to the eaſtwards of the Iland of Cape Cleare, lyeth another Iland called Ile Sherk. To the eaſtwards of it, betwixt that Iland and the maine land, goeth in a haven called Baltemoore haven: It is ſomewhat narrow at the mouth of the haven, but within the mouth of the haven it is large and broad, there may you anckor on both ſides where you will, and lye land-lockt for all windes. On the weſt ſide within the haven ſtandeth a Friery, cloſe before it you may anckor in fiue and ſixe fathom; in the middeſt of the haven it is ſixe and ſeven fathom deepe. A litle to the northwardes of the foreſayd Friery ſtandeth a caſtle upon a point. In the mouth of the haven lyeth a ſunken rock, neereſt to the eaſt ſide, and within in the middeſt of the haven lieth a rocke, which at high water lyeth under, and at low water lyeth aboue water, there is nothing els that can hurt. A little to the eaſtwardes without the haven, lyeth another rock ſixe or ſeven ſhippes lengths from the ſhore.

Ile Sherk.

Baltemore Haven.

To the northwardes of the Iland of the Ile Sherke, men may goe to the weſtwards through betwixt Ile Sherke, and the Iland Spain, & come out againe into ſea by C. Cleare, but it is to bee done onely with ſmall ſhipping, and yet not without danger. Betwixt Ile Sherke and Spain, is at halfe flood not more then twelue or thirteene foote water. At divers other places betwixt theſe Ilands it is rocky and ſhould, ſo that it is not good to goe through within, except men bee very well acquainted, and yet at high water and ſpring tydes.

For to ſaile through within the Ilands of C. Cleare.

A litle league to the eaſtwards of Baltemoore lye the Staggs, an Engliſh mile from the ſhore, they are fiue or ſixe high ſteepe rockes. When men come from the eaſtwardes alongſt by the ſhore, and get firſt ſight of them, they are like unto ſome ſpirie towers together, men may ſayle through betwixt them and the maine land, it is there large and broad enough.

Staggs.

Northeaſt about two leagues from the foreſayd Staggs, lieth Caſtlehaven, without it on the eaſt ſide lyeth a litle Iland, you muſt leaue it on ſtarboord ſide in ſayling in, and another litle flat Iland on the larboord ſide, that lyeth ſo cloſe to the land, that at low water men may go dry foot over from it to the maine land. Within the haven ſtandeth a little Chappell, when you will ſaile in there, you muſt run in right with it, cloſe alongſt by the foreſayd little Iland on the eaſt ſide: when you are come in, thwart of the Chappell, you ſhall ſee a Caſtle on the weſt ſide, over againſt that Caſtle you may ankor in 12 fathom.

Caſtle Haven.

From Caſtle-haven vnto the Old head, the coaſt lyeth moſt e.n.e. and w.ſ.w. but C. Cleare and the Oldhead lye northeaſt and by eaſt, and ſouthweſt and by weſt, diſtant 13 or 14 leagues.

About halfe wayes betwixt Caſtle haven and the Oldhead, lyeth a high poynt called by the Iriſh, Kendonetedo, there by it on the weſt ſide is a good haven called Clandore: For to ſayle in there, you muſt run in alongſt cloſe aboord by that foreſayd high land on the eaſt ſide, for to ſhun a rane of rockes that lyeth on the weſt ſide, and lyeth off ſomewhat towardes the eaſt ſide: when you are come in, you may ankor before a Caſtle in fiue, ſixe, or ſeven fathom.

Kendone-tedo.

Clandore.

Of the tydes and courſe of the ſtreames.

AT the Mizanhead, C. Cleare, and the coaſts to the eaſtwards, a w ſ.w. and e.n.e. moon maketh high water, within the havens and indraughts, a poynt later, to wit, eaſt and by north, and weſt and by ſouth. But in the channell a ſeabord the land, a northeaſt and ſouthweſt moone.

Without C. Cleare by the land, the flood falleth away eaſt, and the ebbe weſt, but to the eaſtwards of C. Cleare e.n.e. and w.ſ.w.

Depths.

BEtwixt C. Cleare and the Dorſeys men may ſee the land in 58 and 60 fathom.

From C. Cleare to the eaſtwardes unto Waterford, men may ſee the land in 45 fathō. The moſt part of the ſouth coaſt of Ireland men may ſee it in 35 and 40 fathom. In 35 fathom you ſhall not be farre from the land. Therefore come no neerer Ireland by night then in 40 fathom.

Courſes

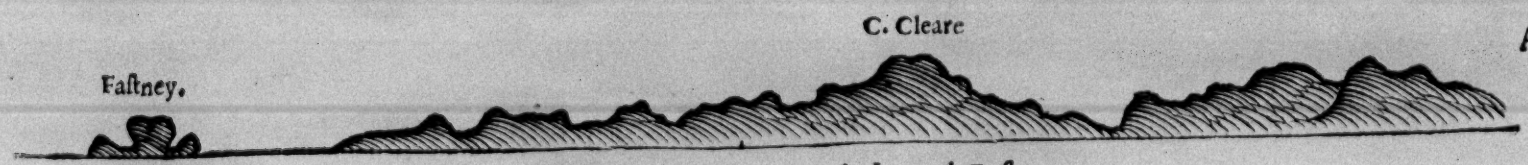
Courſes and Diſtances.

FRom Mizan-head to C. Cleare eaſt and by ſouth diſtant 7 leagues.
From C. Cleare to Crookhaven n.w. 5 leagues.
From C. Cleare to C. Veelo or Oldhead eaſt-northeaſt 13 leagues.
From Cape Cleare to the Landſend of England ſoutheaſt and by eaſt 53 leagues.
From C. Cleare to Silly ſoutheaſt 47 leagues.
From C. Clear to C. de Finiſterre ſouth 173 leag

Heights.

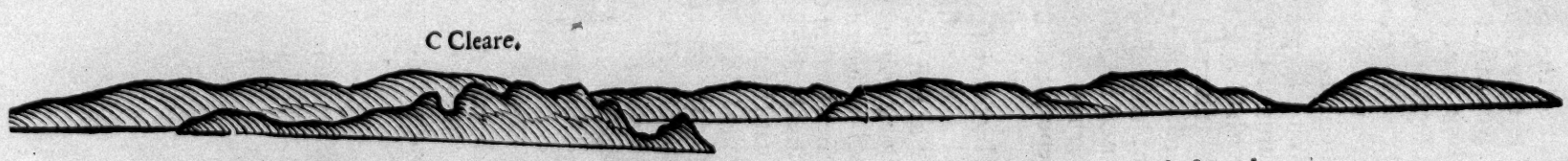
C. Clear lieth in 51 degrees 12 minutes.

Howe theſe lands do ſhewe themſelues at ſea.



The forme of C. Cleare with the rock Faſtney.

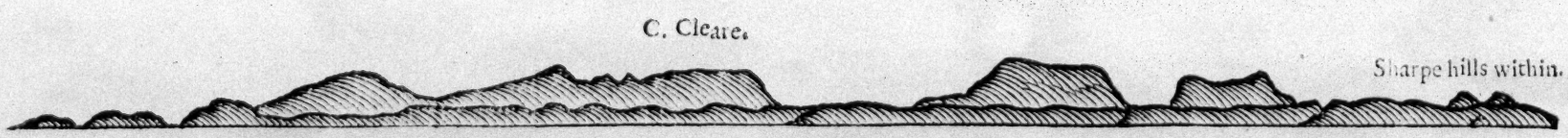
This belongeth to the figure going before the A A *one to the other, is the land to the eaſtwards of Baltemoore.*



Thus ſheweth C. Cleare when it is north from you fiue leagues, and there it is 68 fathom deepe.

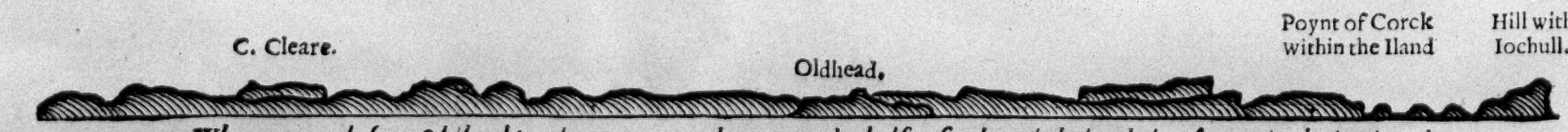
C. Cleare ſheweth thus being north and by weſt from you.

The



The Cape Cleare being northweſt ſeven or eight leagues off from you, ſheweth thus. If you then beare in north, you ſhall fall right with the Old head, and when you come neere the ſhore, you ſhall looſe ſight of the high land, and it ſhall ſeeme to be all low land

This followeth the former figure, the eaſtermoſt hommockes at A are the high hills about Iochull, which you ſhall hardly ſee when C. Cleare is northweſt from you 7 or 8 leagues off, they lye farre within the land, and the clouds oftentimes hang over them.



When you are before Oldhead two leagues, or two leagues and a halfe a ſea-boord the land, then ſheweth the land to the weſtwards unto C. Cleare, and the land to the eaſtwards of Oldhead, in this forme.

When the poynt of Roſſe is weſt and by north from you, it ſheweth thus.

betweixt Mizenhead and Oldhead.

CHAP. X.

The ſouth coaſt of Ireland from Oldhead to Waterford.

THE Oldhead, or C. de Velho, is a point that lyeth out farre without the other land, the outermoſt ſouth end of it is very high and ſteepe, when you come alongſt the ſhore from the eaſt or from the weſt, and ſee it firſt, it ſeemeth to bee an Iland, upon the top of it ſtandeth a ruined caſtle with three Towers, whereof the middlemoſt is the higheſt. On both ſides of this outlying point, men may ankor ſo deepe or ſhowld as they will.

Kinſale. About two leagues north and by eaſt from that point, lyeth the haven of Kinſale, lying in northnortheaſt, you may ſaile in there, keeping the middle of the channell, there is no danger, neither without nor in the harbours mouth, but one ſuncken rock cloſe by the eaſt point. When you come in from the Oldhead, or from the ſouthwards, and you keep an old ruined caſtle (that ſtandeth within the haven on the eaſt ſide) even without the Innermoſt eaſt poynt of the haven, then you ſhall not come neere that rocke to take any hurt of it. About a great halfe league to the eaſtwardes of the havens mouth, lye two great blacke-rockes, the one ſomewhat further from the ſhore then the other. When you come from the eaſtwards, and you will goe in cloſe about the eaſt point, and you keepe the ſouthermoſt (that is the greateſt) right on the eaſt poynt, then you ſhall go through betwixt the ſunken rock and the poynt: but if you keepe the northermoſt (or the ſmalleſt) a little without the foreſayd point, ſo long vntil you haue brought the foreſayd old ruined Caſtle, without the innermoſt poynt, then you ſhall goe alongſt without it, & then in the midſt of the channell alongſt by the eaſter ſhore. A little paſt that foreſayd old ruined Caſtle, ſtandeth a Caſtle on the weſt ſide upon a poynt, there lyeth off a ſhowld, which muſt be ſhunned, and therefore muſt keepe cloſe alongſt by the eaſter ſhore, untill you be gotten about the ſhowld of the Caſtle, and then weſtwardes up unto the Kay of Kinſale, there you may anckor in eight or nine fathom, and lye landlockt for all windes. The towne Kinſale lyeth a little to the northwardes in a bay, where it is ſoft oaſie ground, part whereof falleth dry at lowe water.

Corck. Foure leagues to the eaſtwardes of Kinſale, lyeth the haven of Corck, betwixt both about a league to the weſtwardes of Corck, you ſhall ſee (ſailing alongſt the coaſt) two ſteepe hommockes like Towers in the land, not farre one from the other: theſe are notable marks for to know the coaſt. When you are thwart of the eaſtermoſt, you may ſee the havens mouth of Corck, that lyeth in northnorthweſt; within it is wide and broad, and goeth up into the land with a broad river. On the eaſt ſide, ſomewhat within, is a poynt, where lyeth off a ledge of rockes, which muſt be ſhunned. There over againſt on the weſt ſide, ſomewhat farre in, lyeth another poynt with an old ruined Caſtle, there alſo lyeth off a ſhowld; to the northwardes of it men goe about to Corck. Within that Caſtle lyeth a little tyde-haven in a ſandy Bay. Within the haven lyeth an Iland, where men doe ſaile round about, and at the ſouth ſide thereof may ride. It is in this haven of Corck at lowe water, ſeven, eight, and ten fathom deepe.

A little without the eaſt poynt ſtandeth an old ruined Caſtle upon the low land, and ſomwhat further eaſtward, a ſquare Tower in a valley. A league to the eaſtwardes of the havens mouth ſtandeth a Tower upon a high poynt, cloſe to the water ſide, with ten or twelue thatcht houſes by it. Moreover, a league further eaſt, by a ſmooth poynt, lyeth a long rock growen about with greene, vpon the eaſt ſide of that poynt ſtandeth a flat Tower. Further, it is to the eaſtwardes all lowe land, vnto the poynt of Iochull.

Foure leagues to the eaſtwardes of Corck-haven lyeth an Iland called Ballecotton, Ballecotton Ile. within it men may ride for weſterly and ſoutherly windes, in foure, fiue, or ſixe fathom. Corck and Iochull lye eaſtnortheaſt and weſtſouthweſt, diſtant ſeven or eight leagues.

The haven of Iochul is a bard haven, where Iochull. men muſt goe in at high water, by the eaſtland it lyeth in northweſt and northweſt and by north. The weſt ſide is a ſandy ſtrand all alongſt to the Towne.

About a league ſouth and by weſt from the Chappell-Ile. havens mouth of Iochull, lyeth a little Iland called Chappell: under it on the eaſt ſide is a good road. He that commeth before Iochull at a low water, may goe under that foreſayd Iland to ride there, and ſtay for the laſt quarter flood, then there is foure fathom water upon the bank. At the weſt poynt of the Havens mouth lyeth a rocke within it. About halfe wayes to the towne ſtandeth a Friery, before it men may ride, they may alſo edge over to the eaſtland, and then run up the river.

Within

Duytſche mylen 15 in een graedt

Spaenſche mylē 17½ in een graedt

Eng: en Fr: mylen 20 in een graedt

C V S T V A N

Y E R L A N D

Corck

Balkhed

Kynſael

moddet

Kaij

Verwallen Caſteel

Withuijs

Sandhaij

Sandhaij

Corkbeg

Balicottan

Cotton ile

Aldehed ofte Oldhooft

De Zuijdcust van yerlandt tuſschen Oldhooft en Waterfoord

Waterfoord

Thicke point

Paſsage

Croock point

Strammore Bay

Dungarvan

Thege landt van Dungarvan

C. Dongi

Thege landt van Ardimore

Ardimore caſtel

Ardimore point

Capel ile

Hauckstow

84

Ar

Do
val

C.

Within it is three, foure, and fiue fathom deep. From the eaſt ſide lyeth a rane of rockes, at leaſt halfe wayes over in the havens mouth, a little without the rockes it is at low water no more then fiue or ſixe foote water, but at high water it is deepe enough.

Foure leagues to the eaſtwardes of Iochull, lyeth Dongarvan haven, betwixt both lyeth an out poynt; a little to the eaſtwardes of it ſtandeth a high blacke Tower called Ardimore, which may bee ſeen well foure leagues at ſea; within it, is a bay, which is a good roade for weſterly windes in ſeven or eight fathom.

Ardimore

Dongarvan is a narrow tyde-haven, the mouth of the haven is full of rockes, and at lowe water it falleth drye, men muſt goe in there at high water, and runne in through betwixt the rockes, it lyeth in northnorthweſt, within it is deepe enough. The towne Dongarvan lyeth upon the weſt ſide of the haven. From Dongarvan to waterford are eight leagues.

Dongarvan.

Within Dongarvan, northnorthweſt landwards in, lyeth the mountaine of Sleges, which men doe call the high mountaine of Dongarvan, or Cape de Quin, or Cary Quin, it ſheweth it ſelfe with three exceeding high hommockes, farre aboue all other landes, thereabouts men may ſee it at ſea, alongſt a great part of the ſouth-coaſt of Ireland.

C. Quin.

When you ſhall haue that mountaine northnorthweſt from you, and ſaile in right with it, you ſhall fall right with Dongarvan.

When you ſhall haue it north of you, and ſayle in right with it, then you ſhall fall with Iochull; being northnortheaſt, then you ſhall fall with Corck, but when it ſhall be northweſt, and ſo run in, you ſhall fall with Waterford.

Of the tydes, and courſe of the ſtreames.

ON theſe ſouth coaſtes of Ireland an eaſtnortheaſt and weſtſouthweſt moone maketh high water, within the havens a poynt later, to wit, an eaſt and by north, and weſt and by ſouth moone: but in the offing a ſea-boord a ſouthweſt and northeaſt Moone.

Betwixt C. Cleare, alongſt the coaſt before Waterford, unto the poynt of Carnaroort, the flood falleth alongſt the coaſt eaſtnortheaſt, and the ebbe weſtſouthweſt.

Courſes and Diſtances.

FRom Oldhead, or C. de Velho, to the haven of Kinſale, is the courſe north and by eaſt 2 leagues.

From Oldhead, or C. de Velho to Corck northeaſt and by eaſt 5 leagues.

From Corck to Waterford the coaſt lyeth moſt eaſtnortheaſt.

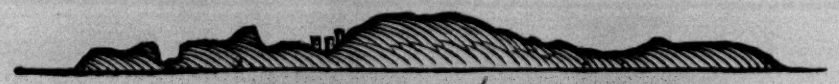
From C. de Velho to the Landes end of England ſoutheaſt 45 leagues.

Heights.

Cape de Velho, or Oldhead lyeth in 51 degrees 28 minutes.

Hovv theſe lands do ſhevv themſelues at ſea.

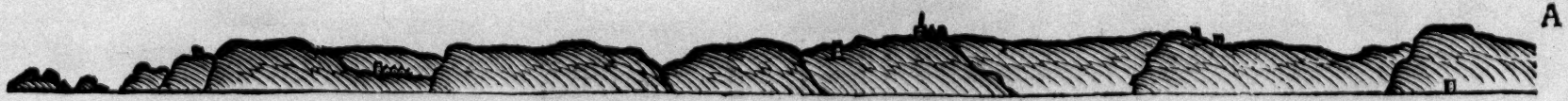
Thus ſheweth Oldhead when it is W.S.W. a halfe league from you, then may you ſee the haven of Kinſale open.



When Old head is weſt two leagues from you, it ſheweth in this forme.

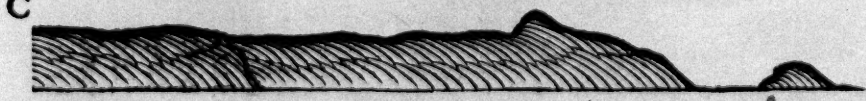
The land a little to the eaſtwards of Kinſale ſheweth thus.

The land to the eaſtwards of Corck towardes Iochull ſheweth in this forme.



A

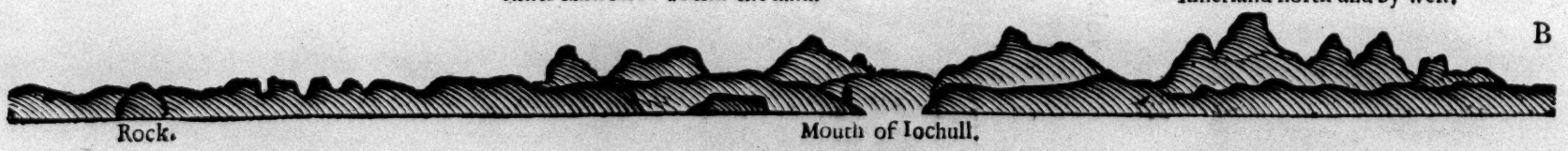
old ruined houſes.



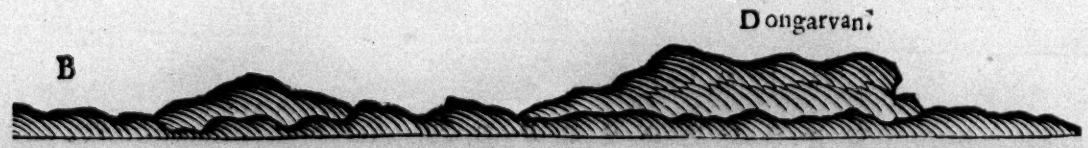
C

The Rock betwixt Iochull and Corck

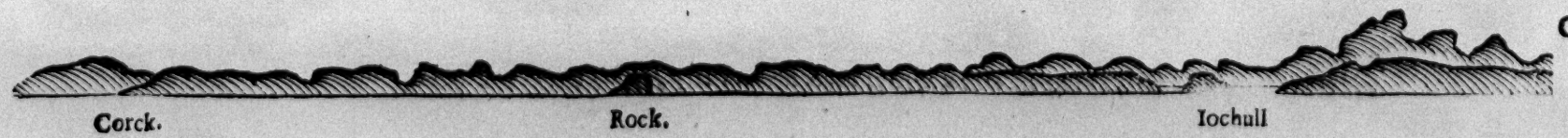
When you are to the eaſtwardes of Corck, not farre from land, and that the harbours mouth doth begin to open, then ſheweth the land as is deſcribed in theſe two figures, at the A A belonging one to the other, being neere the land, it ſeemeth to be high land, but a far off (when you can ſee the high inner land (within Iochull) over the Cliff land) it ſeemeth to be but low.

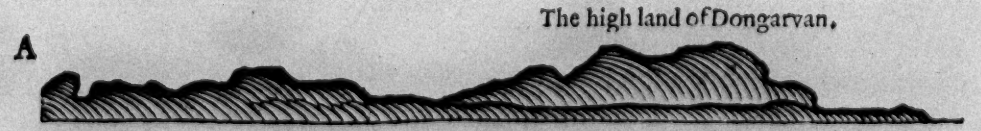


These two figures belong at the B B *one to the other.*



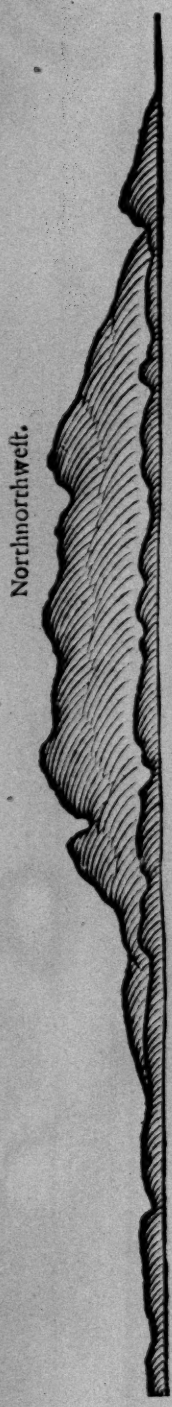
When you are before Iochull, or thereabouts, (two or three leagues from land) so that the high Mountaine of Cape Quin be north and by west from you, then sheweth the land thus, the double inner land is very high blew land, you may see it in cleare weather twelue or thirteene leagues off.





These two figures belong at the C C *one to the other, and is the forme of the land betwixt Corck and Iochull.*

betwixt Oldhead and Waterford.



The high Land of Dongarvan sheweth thus being northnorthwest from you.

Thus sheweth the high Land of Dongarvan when the the westermost end of it is northwest from you.

To the Booke-binder.

Place the Cardes thus.

Numb.				fol.
74 and 75	before	—	—	65
76	—	—	—	73
77	—	—	—	77
78	—	—	—	79
79	—	—	—	83
80	—	—	—	83
81	—	—	—	89
82	—	—	—	91
83	—	—	—	95
84	—	—	—	99

The third parts

FOVRTH BOOKE

of the

SEA-MIRROVR

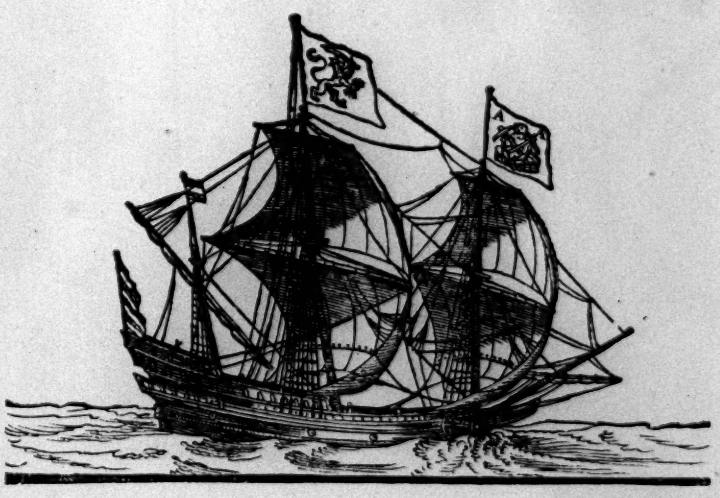
of the Weſterne and Southerne

NAVIGATION.

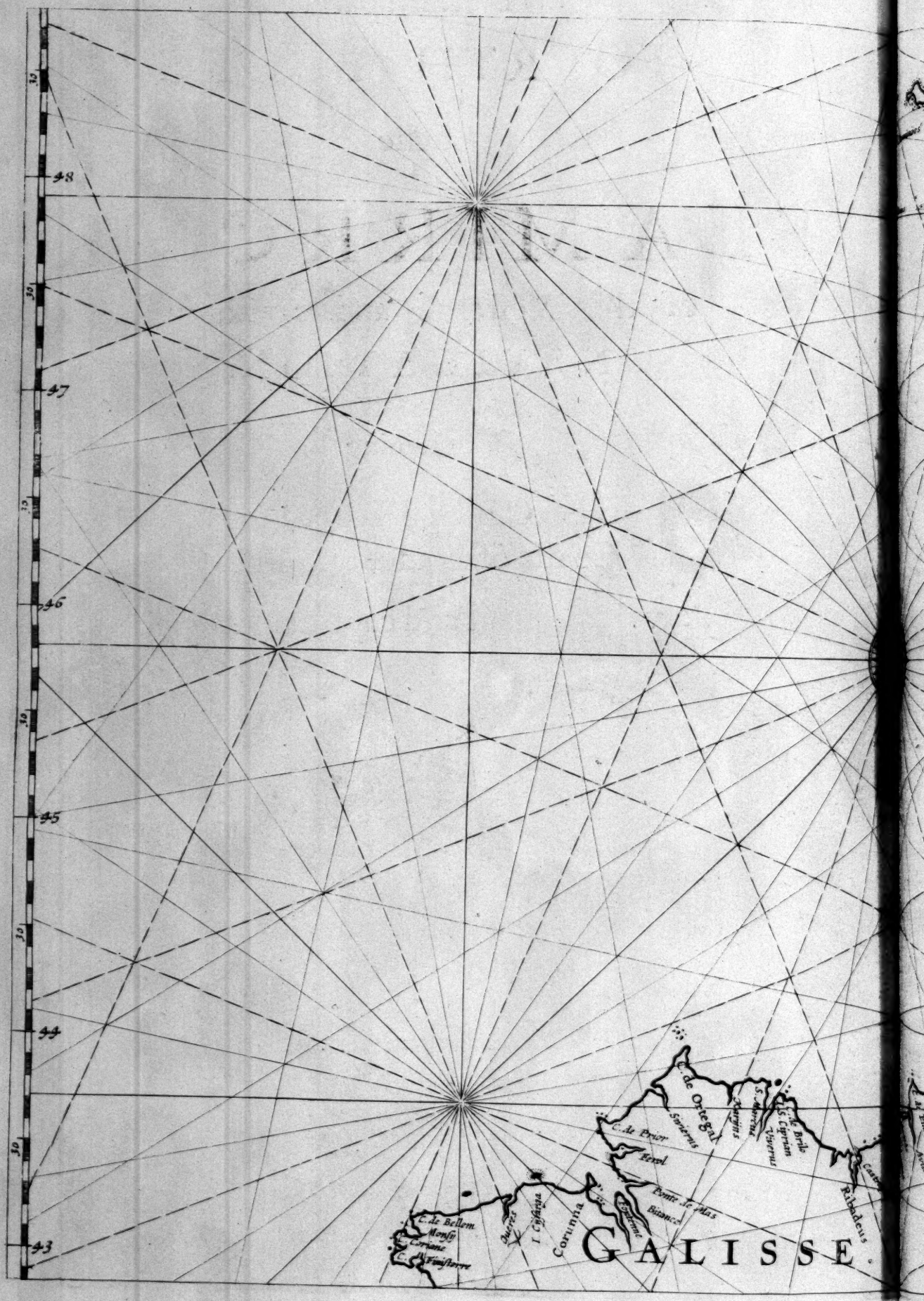
Containing

THE DESCRIPTION OF THE Coaſts of France and Biſcay

Betvvixt Vſhant and cape de Ortegall.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.


48
47
46
45
44
43
C. de Ortegal
C. de Prior
Ferrol
Ponte de Olas
Betanços
C. de Bello
Visterus
Ribadeus
C. de Bellem
Monsi
Finisterre
Corunna
GALISSE

Pascaarte van Vrancrijck Biscayen en Galißen tußchen Heyßant en C. de Finesterre

Duitsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graedt

Engelsche mijlen 20 in een graedt

BRE

TAIGNE.

POICTOV.

BISCAIA

Rochelle

Bayone

Met Privilegie der Ed. H. M. Heeren Staten generael voor thien jaren.

Duijtsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graedt

Eng: en Fr: mijlen 20 in een graedt

Isle bas

Roscou

Port Louel

Obrurac

Landerneau

Le fou

Bresthaven

Brest

Crodun

Barbrams haij

S. Mahres Clooster

S. Mahres haven

Conquet

Conquets haven

Conquets diep

Blanc haij

Le four

Poinct

Becovent

Elorsal

Le Bel

Kimmencßen

Zuydthoorle

Noordthoorle

Heißant

BRETAIGN

De Zeecusten
en Eijstanden
aent westeijnde
van Bretaignen

Wester
Penmarkes

West
Penmarkes

Odegirne

Boldavit

Slorglakens

Pontchau

Vriesche bay

Kesser

Kesserun

Kalf

Ras van Pontchau

Breesondt

Les Seems

60

40

15

50

65

86

THE FOVRTH BOOKE of the VVESTERNE NAVIGATION,

Containing the Deſcription of the Coaſtes of France and Biſcay, betvvixt Vſhant and cape de Ortegall.

CHAP. I.

Of the Coaſtes and Ilands at the outermoſt vveſt end of Britaigne.

FROM the Iland Ile de Bas unto the Fourne, (the outermoſt or the weſtermoſt end of the maine land of Brittaigne) the courſe is weſtſouthweſt, and weſt and by ſouth thirteene leagues. About halfe wayes betwixt them both lyeth Obbevrack, or Abberwrack

Abberwrack.

About a league northweſt without the rocks of Obbevrack or Abberwrack lyeth a rane of rockes under water. They that by night wil ſaile or turne to windwardes from the Fourne or towardes the Fourne, let them not come thereabouts neerer the land then in 45 fathom.

The Fourn

A league to the eaſtwards of the Fourne, and all alongſt the coaſt even unto the Fourne, lye many long black ragged rockes, at many places to looke to like villages, theſe are called the Ovens, within them on the maine land (which is not very high) men ſhall ſee (ſailing alongſt by them) many white ſand-bayes, and here & there ſome little houſes, whereby the foreſayd land thereabouts is very good to be knowne.

Vſhant.

The Fourne and Vſhant lye weſtſouthweſt and eaſtnortheaſt diſtant two great leagues. Vſhant ſheweth it ſelfe at ſea at the ſouthend low, and at the north end going up ſloping, upon the midſt of it ſtandeth a little flat tower, by which markes it is good to be knowne.

For to ſaile through within Vſhant, the courſe from the Fourne to S. Mathwes poynt is ſouthſoutheaſt foure leagues. At the poynt of the Fourne lye two rowes of little rockes, and to the ſouthwardes of them alongſt the Coaſt lye three other heapes of rockes, each of them about an Engliſh mile one from the other: runne alongſt within two cables lengths by the foreſaid rockes at the poynt, which is much neerer the eaſt ſide, or the maine land, then Vſhant, for to ſhun the norther Haghels, which doe lye betwixt Vſhant and the foreſayd rockes or Ovens, or els if you keepe S. Mathewes Abbey in the low valley to the eaſtwardes of Conquets oort, and ſaile ſo right with it, then you run through neereſt the eaſt ſide, and in the middeſt of the channell, betwixt the fowle ground and the rocks, untill you come thwart of Blanckbay, or neere Conquets oort; there ſtandeth a mill vpon the high land, alone, when it is eaſt from you, then the ſouther Haghels lye weſt and by north from you, and the norther Haghels northweſt and by weſt: there is alſo a high flat peece of land, a little to the eaſtwardes of the Abbey of S. Mathewes, the top of it being even and plaine, like unto a long plaine houſe, vvhen that commeth even without the poynt Conquers oort, and the foreſayd mill be eaſt and by ſouth, and eaſtſoutheaſt from you, then lye the north Haghels vveſt & by ſouth from you, ſo that when the foreſaid mill is eaſt thwart from you, then are alſo the Haghels weſt thwart from you. When Halman or Hayman-hill (that is a high rock lying at the eaſt end of Vſhant) cometh over the northweſt end of the northermoſt Mollens by the French called Cheminees, then are you alſo thwart of the Haghels.

Haghels.

Norther Haghels.

Halman.

He that muſt turne to windwardes from the Fourn towards Conquet, or S. Mathews point, let him make uſe of theſe markes: In the point of Conquet haven, or Conquets oort, are two valleys the one great, that is the weſtermoſt, and one litle, that is the eaſtermoſt, in manner as is here portrayed:

Conquets oort.

When

When you runne over to the eaſtwards towards the land, and that the Abbey of S. Mathewes commeth a capſtone barres length to the eaſtwards of the ſmalleſt valley, according as is ſhewed in this figure, then it is time to caſt about: and when you runne over to the weſtwards towards Vſhant, and that the foreſayd Abbey of S. Mathewes commeth a little without the poynt of Conquet haven, you muſt alſo caſt about, for when the foreſayd Abbey commeth two ſhips lengths without the foreſayd poynt, then are you cloſe by the Haghels. The Norther and the Souther Haghels lye about a ſhot of a caſt peece diſtant one from the other.

Two or three Cables lengths thwart from the poynt of Conquet haven, or Conquets oort to ſeawards, lyeth a ſuncken rock, which with a ſpring tyde cometh aboue water, called the Vintner, by the French le Bel. For to avoid it coming from the northwards, or from the Fourne, and being come upon the foreſayd marks (of S. Mathews Abby in the great valley of Cõquets oort) vnto cloſe by Cõquets oort, then run cloſe about by it, alongſt within a cables length of the poynt, or keepe the Abbey of S. Mathewes even without to the poynt of Conquet oort, and ſo cloſe about it, within a cables length, as before is ſayd, and then you ſhall leaue the Vintner a Cables length or two on the ſtarboord ſide of you, and can take no hurt of it.

The Vintner.

When the little Church upon the poynt of Conquets oort is eaſt from you, then is the Vintner weſt right thwart from you, or els when that the Souther houſes of Conquet, begin to come without, or to the poynt of Conquet, then you haue alſo the Vintner vpon your ſide, weſt and weſt & by ſouth from you, a little ſhot of a caſt peece.

Conquet haven.

If you ſaile into Conquet haven, then run about the point within a cables length, as is beforeſaid, vntil you ſee the haven open, then you come againſt the Feneſtirs, which are rockes that lie off about a cables length from the eaſt land of Conquet haven vnder water: For to avoide them, runne alongſt by the norther ſhore, vntill you come within the haven.

Feneſtiers.

Betwixt the Feneſtiers and the blanck Moines (that are rocks by Saint Mathewes point) is a good roade vnder the Abbey of S. Mathews as well for them that are bound to the northwards as to the ſouthwardes. If you will goe into this road comming from Conquets oort, then runne right with the blanck Moines, untill that the Abbey of S. Mathewes bee eaſt ſoutheaſt from you, ſaile then towards it until you come before the Abbey, & anckor there in ſix or ſeven fathom.

Blanck Moines.

About a league to the eaſtwards of S. Mathewes poynt, towards Breſt, lyeth a ſuncken rock, about halfe a ſhot of a caſt peece from the north ſhore. If you will ſaile into Breſtwater, then goe from S. Mathewes poynt away eaſt and by ſouth, and eaſtſoutheaſt, and keep the north end of the Southermoſt Mollens, without S. Mathewes poynt, ſo long vntill that the mill upon the northland come to the northwardes of the trees, then you ſaile alongſt to the ſouthwardes of the foreſayd rock, and ſo doing, you can take no hurt of it; but if you bring the ſouth end of the Mollens neere or to S. Mathewes poynt, you ſhall not faile to ſaile vpon it.

For to ſaile to the northwardes of the foreſayd rocke, you muſt runne from S. Mathewes poynt alongſt by the North land, and keepe the ſouthermoſt Mollens hidden behinde the great rock that lyeth off from S. Mathews poynt, and ſaile then right with the weſt point of Bartrams bay, vntill that the foreſayd mill ſtanding upon the north land, commeth to be northweſt and by north from you, and the trees ſtand northnorthweſt from you, then ſhall you be paſt the foreſayd rock; but to run alongſt to the ſouthwardes of it, is beſt and broadeſt. For to ſaile forth alongſt to Breſt, (being paſt the foreſayd rock) you muſt run forth within two Cables lengths alongſt by the north ſhore. A little within the eaſt poynt of Crodan, or Claeſdownes, lyeth a rane of rockes, about the middeſt of the chanell in the mouth of Breſtwater, which at low water lye aboue water, and at high water are vnder water, called the Baginne, you may runne alongſt on both ſides of it, but to the northwards of it, is beſt; when the ſouth point of Breſtwater commeth over the poynt of Crodan, then are you thwart of the foreſayd Bagyn, which lyeth about two cables lengths from the north ſhore, runne alongſt to the northwards of it: when then Breſt commeth without the poynt, ſaile then ſo right to it, you muſt anckor there with an ankor to ſeawards in eight or nine fathom, and with a cable a ſhore faſt on a tree; When you come within the Bagyn, you may edge up to the eaſtwards, or to the ſouthwards before the river of Landerneau or Lefou, and anckor there under the ſouth land, in ten, twelue, or thirteene fathom, before the litle towne old Croidan. Breſtwater, or the river of Landerneau, lyeth in moſt eaſtnortheaſt, and it is Pilotes water, he that is bound in there, may take a Pilot to bring him in where he deſireth to bee: It floweth there with an ordinary tyde, three fathom up and downe.

Baghynne.

Lefou.

downe, a southwest and by west, and northeast and by east moone maketh there full sea.

If you come to ankor within Brest, you must pay for ankeridge ten soubs, and for it you shal get a ticket of freedom. If it showld happen that you should loose your shippe upon Brittaigne, you might therewith challenge your goods, els they are unfree.

Bartrams bay. Bartrams bay lyeth about two leagues to the eastwards of S. Mathewes poynt, a litle league past the foresaid suncken rock, there is good ankering for a north, and northeast winde, in 10 and 11 fathom

Croidan. Over against Bartrams bay lyeth Croidan or Claesdowns from S. Mathewes point, southeast distant about 3 leagues, it is a great bay. For to saile from S. Mathewes poynt to Croidan, you must keep the southermost Mullens even without the Blank moines (that are the rocks without S. Mathewes poynt) and go away east and by south, and e.s.e. untill you come before the bay, & may see open into it, then you shall see a chappell, or little Church stand upon a chindle, run in right with it, and anckor thereabouts, in 6, 7, 8, 9, or 10 fathom, there is the best road.

Mullens. The Mullens are the rocks which lye there to the southwards of Vshant, and to the westwards from S. Mathews poynt. Betwixt them and Vshant lyeth a chanell northeast & southwest through, which is indifferent, large, and broad, and deepe enough, there remaineth at low water, 6, and 7 fathom water. Hee that commeth from the northwards, and cannot saile a wether of Vshant and the Mullens, by reason of the flood, may runne through here, or he that commeth out of the sea, and with northerly windes, cannot saile a wether of Vshant, may with a flood run through here, and so further his voyage, when men run through here, either in or out, and keepe the middle of the chanell betwixt both lands, they can take no hurt.

From S. Mathews point to the Race of Fontenay, or the Keyser and Lavender, the course is south and by east fiue leagues, betwixt them both lye divers rocks, whereof men must take good heed, as the Hen with the Chickens, the Collier, the Falconers, Scheminckelborrows, and other more. The Hen with the Chickens, & the middlemost Falconer or Foukenisse, lye from S. Mathewes point s.s.e. & by east distant a league & halfe, but the Collier lieth from S. Mathews point s.s.e. also a league and halfe.

Henne. Chickens.

Falkoners. The southermost Falkoner. The Falconers, or Foukenessen, lye from the west point of Croidan about w.s.w. an English mile. The innermost or southermost Falconer lieth from the northermost, s.s.e. about a halfe league, or two shots of a cast peece, and from Croidon s.w. and by south, and is covered at high water. N.n.e. a cables length from it, lyeth another sunken rock, which at low water, may even be seen. To the westwardes of the northermost Falkoner lieth also a sunken rock which at low water may even be seen.

The Hen lyeth from the Falkoners w.s.w. about 2 cables lengths, or a shot of a cast peece, it is a round sharpe rock, it is round about it deepe & cleane, in 6 and 7 fathom. The Chickens are two sharp little rockes, which at lowe vvater may even be seene, and lye about the shot of a Base n. n. w. from the Hen, and west from the northermost Falconer. The Hen. Chickens.

The Scheminckelboroughs lye to the southwards of the Falkoners, men may run through betwixt them in ten fathom to the point of Croidon, there is good road & ankorground. Scheminkelborroughes.

If you will saile from S. Mathewes poynt to the Race of Fontenay, you must go away south and by east, and bring the mill of Fenestiers, which standeth upon the east poynt of Conquet haven, over the poynt of S. Mathewes, a litle to the westwards of the Abbey, and keepe them so standing so long as you can see them, and you shall not come too neere the foresaid rocks, to take any hurt of them. When as then you come to the Keyser and Keyserinne, first giue the Keyser a birth, because of some sunken rockes which lye off from the east side of it under water. From the southwest side of the Lavender runneth off a fowle ledge of rocks called the Calfe, there the tyde falleth very strong over it, with very great rippeling. This channell of the Race of Fontenay, lyeth thorough betwixt the Keyser and Lavender s.s.w. and n.n.e. He that wil saile through here, must bee very carefull to cast his tydes well, for it runneth most thwart over this Race, so that vvith a southwest wind, and an outfall or ebb, and also with calmes, it is very dangerous to come into this Race. Keyser. Lavender. Race of Fontenay.

A litle to the southwards of the Keyser, lieth the east end of the Seams, and lye from thence at least three or foure leagues w.n.w. into sea. A great league northwest from the west point of the Seames, lyeth a sunken rocke, whereof men must take heed. Seames.

And vvestsouthwest about two leagues from the Seames, lyeth a row of rocks, like a banke, vvhereupon it is not deeper then seven fathom, but betwixt the rockes and the Seames it is 50 fathom deepe.

Betwixt the Seames and Vshant the Broad Sound lieth in eastnortheast to S. Mathewes poynt, and from S. Mathews poynt westsouthwest fiue leagues into sea. Broad sound.

Frieze Bay To the eaſtwards of Fontenay, or the Lavender, lyeth the Frieze Bay, there men may ankor for a ſoutheaſt and eaſt winds, in good ankor ground.

Boldavids Bay. To the eaſtwardes of the Frieze Bay lyeth Boldavids Bay, a broad deepe ſound, lying into the land eaſtnortheaſt. At the eaſt ſide of that haven, lye two little Ilands, or rockes, where men may anckor round about them, and lye ſheltred for all windes.

Oldyarne. From the Race of Fontenay to the Pennes, the courſe is ſoutheaſt about nine leagues, betwixt them both lyeth Oldyarne, a good haven; about fiue leagues eaſtſoutheaſt from Fontenay, thwart before the entry of it, lyeth a bank, where men may runne about it on both ſides in ſixe fathom. The ſouth poynt of this haven is flat, therefore runne in alongſt by the north poynt, there is at low water, not leſſe then three fathom depth. From Oldyarne to the Pennes it is ſoutheaſt and by ſouth.

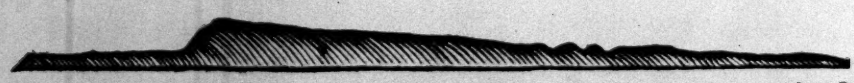
If you wil ankor before Port Kapſtand, you muſt anckor in twelue or thirteen fathom, before the village that ſtandeth vpon the high land, about halfe wayes betwixt the poynt of the Race and the great ſand-bay of Old-yarn, where the litle ſharpe Tower doth ſtand, the poynt of the race ſhall then lye from you about northnorthweſt, and you ſhall then lye a great halfe league from the land, further off from the ſhore it is rocky and fowle ground, as ſome ſay. There haue ſome nevertheleſſe come to anckor there by night three or foure leagues from the ſhore in 25 fathom, but haue not received any hurt neither of Cables nor ankors.

The weſt end of the Seames, and the Pennes, lye ſoutheaſt ſomewhat ſoutherly, and northweſt ſomewhat northerly diſtant about 13 leagues.

Sheetes. The knowledge of the land betwixt Fontenay and Oldyarn, are two round hills which men doe call the Sheetes, or Slaeplakens, to the weſtwardes of them ſtand two milles, It is a very ragged poynt, and by theſe foreſayd markes very good to be knowne. Men may ſee them without the Seames in 55 fathom.

From Oldyarn to the Pennes lyeth the coaſt ſoutheaſt and by ſouth 5 leagues.

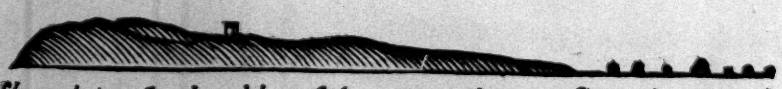
Howv theſe lands do ſhevv themſelues at ſea.



When Vſhant is ſouth and by weſt from you 4 leagues, it ſheweth it ſelfe in this forme.

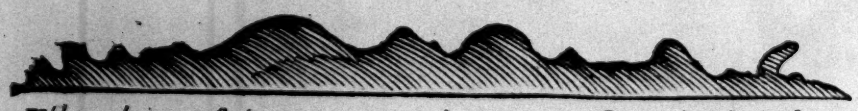
Vſhant being ſouth and by eaſt from you 5 leagues, it ſheweth it ſelfe thus.

Vſhant being ſouth and by eaſt from you 4 leagues, it ſheweth it ſelfe thus.



Vſhant being ſouth and by eaſt from you 3 leagues, ſheweth it ſelfe thus.

Thus ſheweth Vſhant being ſoutheaſt from you 4 leagues.

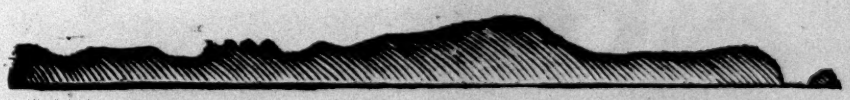


Vſhant being eaſt from you two or three leagues, ſheweth it ſelfe thus.

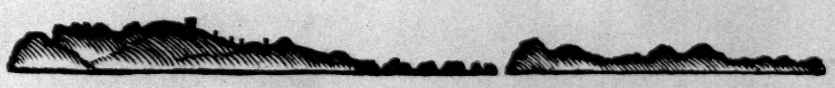
Vſhant being eaſt and by ſouth, and e. ſ. e three or foure leagues from you, ſheweth it ſelfe in this forme.

Thus ſheweth Vſhant when it is eaſt and by ſouth from you foure or fiue leagues.

When Vſhant is foure leagues eaſt from you, it ariſeth in thu forme.



Vſhant being e. n. e. from you fiue leagues, ariſeth thus.



Vſhant being e. n. e. from you 2 or 3 leagues, ſheweth it ſelfe thus.

Vſhant being northeaſt and by eaſt from you ſo farr as you may even ſee it from below, ariſeth in this forme.

When Vſhant is northnortheaſt from you, it ſheweth thus.

Vſhant being northeaſt and by eaſt three or foure leagues from you, ſheweth it ſelfe as it is here demonſtrated.

Thus ſhew the Sheets, or Shaplakens with the Pennes, as you ſaile alongſt by them, and that they are about 4 leagues thwart from you.

Of the tydes and courſe of the ſtreames.

AT Abberwrack an e.n. e. and w.ſ.w. moon maketh full ſea.

Without Vſhant a w.ſ.w. and e.n.e. moon, and within the Trade a ſouthweſt & by weſt moon, maketh full ſea.

At S. Mathewes poynt, a ſouthweſt and northeaſt moon maketh the higheſt water.

In the Broad Sound, betwixt Vſhant and the Seames a w.ſ.w. and e.n.e. moon maketh the higheſt water: the flood falleth very ſtrong upon Vſhant, and to the ſouthwardes of it thorough the Mullens, thwart over the Trade, towards the Backovens. Likewiſe in through the Broad Sound unto Breſt. Alſo alongſt by S. Mathews point towardes the Fourne, or Backovens with very great rippeling. He that commeth ſailing about Vſhant, muſt reckon thereupon.

In the Race of Fontenay a ſouthweſt and by ſouth, and northeaſt and by north moon maketh full ſea. The flood falleth very ſtrong through betwixt the Keyſer, ſomewhat thwart over towards the Lavender, with very great rippeling over the Calfe, (that is the ledge of rocks which lyeth off from the Lavender) and from thence forth north and north and by weſt inwardes to S. Mathewes poynt: with calmes men muſt take very good heed not to be miſcarried away with the current. With ſtormy weather out of the north or ſouth, it is not without danger to come in this channell, eſpecially with an ebbe or out fall.

Of the depths about theſe places, and in what depths men may ſee the land.

THwart of Abberwrack fiue leagues from the land, it is deepe 50 and 55 fathom.

The Backovens, or the land of the Fourne men may ſee in 50 fathom.

Vſhant being about ſouth from you, you may ſee it in fifty fathom.

Southweſt from Vſhant fiue or ſixe leagues off it is deep 75 fathom, and then you may ſee the land from the poop.

In the Broad Sound it is deep 45 fathom.

A little without the Seames, about a league, it is deep 50 fathom.

Men may ſee the Seames and the Sheete, or Slaeplaken, in 60 end 65 fathom.

Betwixt Vſhant and the Seames in the fareway it is deepe 55 fathom.

How theſe landes doe lye one from the other, and from other lands.

FRom Ile de Bas to the Fourne, weſtſouthweſt
— — 16 leagues.
From the Fourne to S. Mathewes poynt ſ.ſ.e. and ſoutheaſt and by ſouth 4 leagues.
From S. Mathews poynt to Croidon, or Claeſdowne e.ſ.e. 3 leagues.
From S. Mathewes poynt to the Race of Fontenay, or the Keyſer, ſouth & by eaſt 5 leagues.

FRom Vſhant to Portland n.e. 53 leagues
From Vſhant to the Steart northeaſt and by north 40 leagues.
From Vſhant to the Lizart north 29 leagues.
From Vſhant to Silly northweſt and by north
— — 37 leagues.
From Vſhant to C. Cleare in Ireland northweſt
— — 84 leagues.
From Vſhant to the Iland of S. Michiels ſouthweſt and by weſt 360 leagues.
From Uſhant to the C. Finiſterre ſ.ſ.w. weſterly 123 leagues.
From Uſhant to Ciſarga ſ.ſ.w. 77 leagues.
From Uſhant to Cape Prior ſouthſouthweſt 106 leagues.
From Uſhant to C. de Pinas ſouth 97 leagues.
From Uſhant to Laredo ſ.ſ.e. 113 leagues.
When men ſaile away ſouth and by eaſt from Uſhant, then they runne a little without the Seames.
From the Race of Fontenay to the Pens ſoutheaſt 9 leagues.
From Fontenay to Oldyarne e.ſ.e. 5 leagues.
From Oldyarne to the Pennes ſoutheaſt and by ſouth 5 leagues.
From the weſt end of the Seames to the Pennes e.ſ.e. ſomewhat ſoutherly 13 leagues.
From the Seames to the Band or Craghe of Oleron ſoutheaſt and by eaſt 112 leagues.
From the Seames to Bayon in France ſoutheaſt 112 leagues.
From the Seames to S. Sebaſtians ſoutheaſt and by ſouth 112 leagues.
From the Seames to Bilbaw ſouthſoutheaſt eaſterly 101 leagues.
From the Seames to S. Andero ſouthſoutheaſt
— — 96 leagues.
From the Seames to Cape de Pinas, or Tores, ſouth 88 leagues.
From the Seames to Ribadeus ſouth and by weſt
— — 93 leagues.
From the Seames to Cape de Ortegall ſ.ſ.w, ſoutherly 90 leagues.
From the Seames C. Finiſterre ſouthweſt and by ſouth ſoutherly 112 leagues.
From the Seames to Sillye northnorthweſt 45 leagues.

Heights.

VShant lyeth in 49 degr. 30 min.
The Seames lye in 48 degr. 5 min.

The

Duytsche mylen 15 in een graedt.

Spaensche mylen 17½ in een graedt

Engelsche en Fr. mylen 20 in een graedt

De Zeecusten van Bretaignen tusschen de Westerpleimarques en de Rivier van Vannes.

B R E T A

Bundet

Glosjlandt

Paiman

S. Guinolas

Illes aux moutons

Glenant

West pen markes

Oester Penmarkes

Vannes

Auray

Olrey

Virane

Hoeck van t' Meyland

S. Iolme

Blauet

Morbeam

Armhan

Baerse

Groije

Cardinael

S. Paul

Bel isle. Boelijn

N E

A I G

87

The F

Glanor
Glenan

Kinder.

CHAP. II.

The Coastes and Ilands betvvixt the Pennes and S. Iolme, or the river of Vannes.

The Penns. THE Pennes are very good to bee knowne, for him that hath ſeene them once: upon the ſoutheaſt end ſtandeth a thick flat tower; a little to the vveſtwardes of it ſtandeth a ſharpe tower, and ſomewhat more to the eaſtwardes againſt the high land, ſtandeth a Village to ſee to like a Caſtle, upon the eaſt ſide thereof ſtandeth a flat tower, and there cloſe to the land lye two great rockes.

The Pennes lye off from the maine land, ſoutheaſt two leagues into ſea. For to ſaile in there, you muſt come in there from the eaſtwardes, and runne alongſt by the ſtrand of the maine land, leaving all the rockes on the larboord ſide, untill that you come to a great rock vvhich you muſt leaue on the ſtarboord ſide, and runne about to the ſouthwardes of it; being paſt it, edge vvithin it up towardes the northweſt, and ankor there a little vvithin, in three fathom at low vvater, lying there, you can ſee no ſea, but at high vvater the ſea commeth very much tumbling in through the rockes: You may goe away from thence at high vvater ſoutheaſt through the rockes into ſea, but you muſt take very good heed, becauſe it is there full of rockes, vvhereof ſome are aboue vvater, and ſome under vvater. Without the foreſayd great rock in the comming in of this haven, it is at leaſt ten fathom deepe, ſo that for need men might well ſaue a great ſhip there.

Glanons. Glenant, From the Pennes to the Glannons or Glenant, the courſe is e.ſ.e. vvith that courſe you ſhall runne alongſt to the ſouthwards of them.

Bindet. Within the Glanons lyeth a haven called Bindet, at the eaſt poynt of that haven it is full of rockes. For to ſaile in there, you muſt take heed unto theſe markes; there ſtand two mills farre vvithin the land, bring the eaſtermoſt of the two over a little caſtle that ſtandeth upon a poynt vvithin the haven, and run in keeping them ſo northeaſt and northeaſt and by eaſt in, and then you cannot take hurt on neither of both ſhores, and being come vvithin the haven, anckor before the town.

A league ſouthweſt from Gloyland or Glenant, by the Dutchmen called the Eaſter-Penmarkes, lyeth a great rocke under vvater, but is good to be eſpied, in regard the ſea alwayes breaketh upon it; as well within as without this rock, it is fortie fathom deepe.

When you come off from the Pennes, vvith an e.ſ.e. courſe, you ſhall run alongſt farre enough to the ſouthwardes of it. About two leagues to the eaſtwardes of Glenant, lye the Ilands of Muttons, by the French called *Iſles aux Moutons*, you may ſaile through betwixt them and the main land, unto Groy, or Blauet, alſo you may ankor vvithin them in 10 or 12 fathom, betwixt the land and the foreſayd Ilands, which are cleane upon the north ſide. Muttons Ilands.

Betwixt the Iland Mutton and Glenant, lieth a rock, for to avoyd it (for them vvhich vvill ſayle through there betwixt them) they muſt leaue one third part of the channell towardes Glenant, and the other two third parts towards Mutton, and then they may boldly run through there without feare.

From Mutton to the Iland Groy the courſe is eaſt and by ſouth, upon the outer ſide of Groy, ſtand 3 or 4 milles, the eaſt end of it goeth ſteep downe, and the weſt end ſloping and flat downe, thereby it is good to be knowne. Vnder Groy is good ankoring for a ſouthweſt wind in ſixe or ſeven fathom: under the northeaſt poynt alſo is a good road for a w. ſ. w. and northweſt wind, there is very good anckorground. At the ſouthweſt end runneth off a fowle ledge, vvhereof men muſt take good heed. Groy.

Within the Iland Groy lyeth the haven of Blauet, which lieth in about northeaſt in foure and fiue fathom. Vpon the weſt ſide of this haven ſtandeth a high ſharpe tower called Quinperley, from the eaſt poynt runneth off a great ledge of rockes, called the Baers, within it on the eaſt ſide of the entry of the haven lye two ſuncken rockes, alſo on the weſt ſide a rock with a hole, which at halfe ebbe is uncovered, whereof men muſt take very good heed in the comming in; men run in alongſt by the weſtland, for to eſchew the foreſayd ſuncken rock and fowle grounds. The markes for to ſaile in there are theſe, there lyeth a litle Iland within in the middeſt of the haven, which you may ſee when you are without the haven. To the eaſtwards of that litle Iland upon the main land, ſtandeth an Abbey, bring that Abbey right to the eaſt poynt of the haven, which lyeth within the Baers, and ſaile right in with it, untill you come thwart of the eaſt poynt within the Baers, and runne in about by it: being within it, there it is wide and broad, you may anckor there before the foreſaid litle Iland in fiue or ſixe fathom, there it is at low water three or foure fathom deepe, or els men commonly runne in about by the poynt untill they come in the oaze. Blauet.

From the Pennes unto Bell-Ile, the courſe is eaſtſoutheaſt one and twentie leagues,

but from Groy to Bell-Ile it is ſouthſoutheaſt fiue leagues. Bel-Ile hath at the northweſt end a ſteepe poynt lying out with a great ſaddle, thereabouts ſtand alſo ſome little houſes, and the end goeth very ſteep downe.

For to know Bell-Ile.

When as Bel-Ile lyeth n. n. e. from you, the weſt end ſheweth it ſelfe in three parts: the weſtermoſt wherof is a great rock, which floweth at a very high water almoſt under, at the eaſt end there divideth it ſelfe off alſo a great rock: by theſe foreſayd marks it is indifferent well to be known, men may ſee Bell-Ile out of the ſea in 55 fathom. At the ſouth ſide lye off many rockes and little Ilands.

Road under Bell-Ile.

If you will ſeek a road under Bell-Ile, then you muſt giue the northweſt end a good birth, off from it lyeth a ſunken rock under water, a good wayes from the land: being come within it, ſaile then within two Cables lengths alongſt by the land, within a Baſe ſhot about by the north poynt, vntill you come before the village with the litle ſharpe tower called Saint Pauls, there ſtandeth a caſtle upon the poynt to the weſtwardes of the foreſayd litle tower, anckor within that poynt in 9 or ten fathom, there you ſhal lye landlockt for a ſouth, ſouthweſt, and northweſt wind. If it blow more northerly, you muſt ſhift, and run before the eaſt end (which is about halfe a league broad) and ankor there in ten or eleven fathom. This Iland lyeth about ſoutheaſt and northweſt, according as the winde bloweth men doe ſhift there from one road to another, it is there every where good riding.

Within the Iland Bell-Ile, to wit, betwixt Bell Ile & the main land, lye many litle Ilands, where at divers places men may ſaile through to the rivers of Vannes, or Morbeam, Roche Barnard, & the river of Nants, cald the Loire.

Cardinall.

Of theſe Ilands are three the principall, the eaſtermoſt is called the Cardinall, the eaſt poynt wherof, and the eaſt poynt of Bell-Ile lye one from the other directly eaſt and by north, and weſt and by ſouth about 4 leagues. The middlemoſt is called by ſome alſo the Cardinal, or els together with the eaſtermoſt the Cardinals. This hath a good haven on the north ſide, going in by a great rock. From the n.w. point of

Sandbank.

the northermoſt or weſtermoſt, runneth a ſandy ſtrand unto the main land, againſt the point betwixt Blauet and Morbeam, ſo that men cannot ſaile there betwixt that and the maine, but at high water it is moſt covered, & at low water it lyeth moſt dry, at low water men may go over there on foote from the Iland to the maine land.

He that cometh from the weſt, and is bound to Morbeam, Roche Barnard, or other places therabouts, muſt run to the ſouthwardes of it, and if he wil not ſaile about to the ſouthwards of Bell-Ile, hee may ſaile through betwixt the northermoſt & the middlemoſt Iland, and alſo he may ſail through betwixt Bel-Ile & the foreſaid Ilands, about to the eaſtwards of the Cardinal. The chanel there betwixt them both, is about a league broad & clean, it lyeth through e.ſ.e. and ſ.e. & by eaſt, men may run alongſt by the Cardinals either by night or by day, in 8, 9, and ten fathom, all clean ſandy ground.

For to ſaile through betwixt the weſtermoſt (which is faſt at the north end with the ſtrand to the main land, and the middlemoſt Iland, the courſe is from the n. w. end of Bell-Ile e.n.e. A litle from the eaſt end of the foreſaid weſtermoſt Iland, lieth a great round rock which you muſt leaue on the larbord ſide, and run alongſt by it, within two or three Cables lengths, and then you ſhall leaue on the ſtarbord ſide to ſeawardes of you a great many rocks, ſome aboue & ſome under water, which lye towards the other Ilands, which you muſt giue a greater birth to, then to the foreſayd great rock. From this foreſaid chanell to the river of Morbeam, or S. Iolme, the courſe is n e. or n. e. and by e. or els if you run about to the eaſtwards of the Cardinall, & are bound to Morbeam, then go away from the eaſt point of the Cardinall, firſt n.w. and n.n.w. and you ſhall haue then in that fareway 8 and 9 fathom depth, go then by litle and litle more northerly right with the point, which lieth to the weſt wards of S. Iolme, there runneth off the ſayd poynt of S. Iolme, a ledge or riffe of rockes almoſt a halfe league into ſea, which you muſt leaue on the ſtarbord ſide, and runne in to the weſtwards of it, betwixt the ledge and a little Iland which lieth e.ſ e. from the weſt point, & is faſt to the forſaid weſt point, with rocks and fowl ground, ſo that you cannot ſaile in alongſt to the weſtwards of it, nor through betweene them: ſo ſoon as you ſhal be entred within the forſaid litle Iland, you muſt giue the weſt point a birth, and runne in alongſt by the eaſt ſhore, which is flat, & lieth from the tower of S. Iolm to the river of Vannes n. w. & ſ. e. but you muſt be ſure to reckon your tide well in this chanell, for it runneth in and out the river of Vannes ſo ſtrong that you cannot ſaile in with an ebb, although it blow a ſtorm, likwiſe doth it to the contrary with the flood, therfore you muſt ſaile in there with a ſtill water. At the middle poynt where the river doth divide it ſelf in two (wherof the one runnneth to Vannes, and the other to Avray) lye many rocks, the moſt part under water, which you leaue on ſtarbord ſide when you are bound to Morbeam or Avray, & on larbord ſide whē you are boūd to Vannes; when you are com ſo farre within,

Morbeam.

that

that the Tower of Morbeam is west from you, anckor there in the middest of the haven, in nine fathom, and then shall Avray the innermost little Tower lye northnorthwest from you, and the other litle Tower north and by east, but the poynt of Mayland eastsoutheast. The wester shore thwart of it is very steep, but oasie and soft, you can take no hurt of it, although you sailed right against it.

The East poynt of the Cardinall, and the entring of the haven of Morbeam lye n. n. w. and s. s. e. one from the other.

Howv these lands do shevv themselues at sea.

Thus sheweth the land betwixt the Pennes and the Glanons, when it is northeast and by east five or sixe leagues from you. This hill is very good to bee knowne, it overtoppeth in height all the land thereabouts. The Pennes are then northnorthwest from you foure or five leagues.

Thus sheweth the land of the Glannons when you saile alongst by it.

The land to the eastwardes of Gloyland or Glanans sheweth thus when you saile alongst by it.

Thus sheweth the west poynt of Groy, when it is three or foure leagues northeast from you.

When Groy is northnortheast from you 4 leagues, it sheweth thus.

Thus ariseth Bel-ile when the northwest end is east from you about foure leagues.

When Bell-ile is northeast from you 4 leagues, it sheweth thus.

When the northwest poynt of Bell-ile is east and by north from you foure leagues, and the southeast poynt is east and by south, & eastsoutheast, then it sheweth thus: when as you saile towards it, and you come neerer the land then the peeces which lye off from the northwest end, at last come to be fast unto Bell-ile.

of

Of the tydes and course of the streames.

ON these coastes of Britaigne, and the Ilands thereabouts, a southwest and northeast moone maketh the highest water: but within in the havens, rivers, in-draughts, and bayes, a southwest and by west, and northeast & by east moon, or a poynt latter, according as the havens or rivers doe lye deepe in the land. Men doe not reckon there any setting or running of the streames, for the flood commeth (through the swelling of the great Ocean) right against the coastes, and so runneth onely into the havens, the ebbe contrariwise goeth thwart from the shore to seawardes, when it falleth: so that men cannot perceiue any course of streames, except it be a little through, or about some poynts of Ilands.

Of the d pths about these lands.

THwart of the Pennes and the Glannons men may see the land in 55 and 60 fathom.

Bell-Ile men may see from below in 55, but under the top in sixtie fathom.

How these landes doe lye one from the other, and from other lands.

FRom the Pennes to the Glannons the course is eastsoutheast 7 leagues.
From Glanons, or Gloyland, to Groy, east and west 9 leagues.
From the east end of Groy to the west end of Bell-Ile, the course is s.s. e. 5 leagues.
From Glanons, or Gloyland, to Bell-Ile, southeast and by east 12 leagues.
From the northwest end of Bel-Ile to the southeast end, the course is southeast and by east — — 3 leagues.
From the Pennes to Bell Ile e.s.e 21 leagues.
From the east end of Bell-Ile to the east end of the Cardinall east and by north 4 leagues.
From the e st poynt of the Cardinall, to the entring of Morbeam n.n.w. 4 leagues.
From the Pennes to Viverus southsouthwest — — 88 leagues.
From the Pennes to Cisarga, southwest and by south 104 leagues.
From Groy to Viverus southwest and by south — — 93 leagues.
From Groy to Cape de Finisterre southwest — 123 leagues.
From Bell-Ile to the river of Bordeaux southeast 50 leagues.
From Bell-Ile to S. Sebastians southsoutheast southerly 80 leagues.
From Bel-Ile to S. Andero south 73 leagues.
From Bell-Ile to C. de Pinas, or Tores, southsouthwest — — 80 leagues.
From Bell-Ile to Cape de Ortegall southwest 90 leagues.
From Bell-Ile to Cape de Finisterre southwest — — 123 leagues.

CHAP. III.

Of the Coastes and Ilands of Britaigne and Poictou betwixt Bell-Ile and S. Martens Iland.

Roache Barnard,

FROM the east poynt of the Cardinall to the river of Roche Barnard, the course is right northeast: there lyeth a little Iland about halfe wayes betwixt the Cardinal and the foresayd river, or rather neerer the Cardinall then the river (for when men are by the river, they can but even see the foresayd little Iland) men runne with the foresayd course of northeast close alongst to the westwards of that little Iland, and shall fall a little to the northwardes of the river, runne then within a Cables length alongst by the shore, unto it, untill that the river doe open it selfe, and then saile in amiddes the channell, and giue the rockes a birth that lye at the easter shore. Being come in within the rockes, you may anckor there, or else saile on against the shore on the starboord side, and so may saue shippe and goods without anckor or cable, if there should be such need. At low water with an ordinary tyde, there is about eleven, and with a spring nine foote water; with an ordinary tyde it floweth there about a fathom, but with a spring two fathom up and downe: the entring of the river lyeth in east and by south. A little to the eastwards of the rivers mouth, lyeth great rock, which at high water is covered.

He that commeth from the river of Nantes, and is bound to Roche Barnard, and is not well acquainted there betwixt both, let him runne so farre to seawards, towards the Cardinall (when he is to the westwards of the Four) vntill that he run about a seaboord of that foresaid litle Iland (lying halfe wayes betwixt the Cardinall and the river of Roche Barnard) then goeth hee surely cleare of all the fowle ground and other dangers, men may saile close alongst by it to the westwards, but to the eastwards of it lye many rockes and showlds.

He

BRETAIGNE.

Lanan

Roche Bernard

De Ruïer Villaine

Aßérat

S. Naharé

Les Pourceaux

Ouistuyn

Croosfuinck

Rockezem

Croisil

Pierre Perco

Rock nant Maylant

S. Iolme

Le four

Cardinael

Pierre noire

Minnecke

Piquelier.

Bel isle,
Boelijn.

Duitſche mijlen 15 in een graedt.

Spaenſche mijlen 17½ in een graedt.

Eng: en Fr: mijlen 20 in een graedt

P O I C

T O V.

De Zeecuſten van Bretaignen en Poictou tuſſchen Boelijn en S. Martens Eijlandt.

Basſmon

Bourgneuf

Chastean

Bonges

De Grave

S. Hilaire

S. Nicolas

Olone

Oijbestiers Abdije

Xillaeds

De Baerſe

Heis.

S. Martins Eijlandt

88

He that will ſaile alongſt to the eaſtwardes or to the northwardes of it, muſt leaue about two third parts of the water to the Iland, and one third part towards the land, and ſo runne through betwixt them, but muſt look out wel.

Croſwyck. Betwixt the Rivers of Roche Bernard and Nantes, lyeth Old-downes, Croiſill, or Croſwyck, and Poelgem. Croſwyck hath two poynts, within the northweſt poynt lyeth the great village of Croſwyck, which hath a thick tower, and there is a great In-draught like a haven, where men may goe to anckor in fiue, ſixe, or ſeven fathom: to the weſtwards of it ſtandeth alſo a flat church upon the high land.

Old downes The land of Old-downes lyeth a litle to the northwards of that Church.

Poelgem. Poelgem is a village to the eaſtwardes of Croſwyck, with a high ſharpe tower.

About two leagues from the land ſouthweſt and by ſouth from Croſwyck, and weſt and by north northerly from the eaſt point of Poelgem, lyeth a great bank, called the Four, which at ſome places falleth dry at low water, and lieth from Bell-Ile neere about eaſt, and lyeth the longeſt way ſouthweſt and northeaſt.

The Four.

For to ſaile into the River of Nantes. If you will ſaile from Bell-Ile to the river of Nantes, then goe away from the eaſt end of the Cardinall, or from the eaſtermoſt rockes that lye off from the Cardinall, directly e.n.e. towardes the weſt poynt of Croſwyck, for to ſaile a wether of the foreſayd Four, ſo long until it begin to ſhowld, and that the ſharp tower of Poelgem cometh againſt the higheſt of the eaſt poynt of Croſwyck, then you run alongſt to the northwards of the foreſaid banck, goe then e.ſ.e. or according as the wind is, eaſt & by ſouth, and e.ſ.e. on, to the rock with the hole, called Pierre-perce, but ſo that you come not very neer (at low water) the land ſomwhat to the weſtwards of Poelgem, for it is not clean alongſt by it Betwixt the Four & the point of Croſwyck it is in the fare-way, 8, 9, and ten fathom deep.

Pierre-perce.

From the point of Poelgem eaſtwards lye ſome litle Ilands & rocks which are very foul, come not very neer them, nor the ſhore there abouts. If it ſhouldhappen that you ſhould here turn to windwards, (for at low water there falleth many of the rockes dry, when you come neer the rock with the hoale) then run alongſt to the northwards of it, and in very cloſe by it, leaving it on the ſtarbord ſide of you, for to avoid the fowle grounds which lye off from the point of Poelgem towards this rock. Cloſe alongſt by this rock it is 4 fathom deep. Being paſt this rock with the hole, then runne all alongſt by the north ſhore, unto S. Nazare in 3 or 4 fathom at low water, but you muſt take heed of a rocky poynt ſomwhat to the weſtwards of S. Nazare, the marks thereof are theſe. There ſtandeth a mill upon the high land, ſomwhat far within the land, when that cometh over a countrey-mans houſe which ſtandeth below by the river, then are you thwart of the rocks: being paſt them, keep yet the north ſhore, and run alongſt by it until you come within the point of S. Nazare, and ankor there in ſixe or ſeven fathom. In the middeſt of the river betwixt the foreſaid rock with the hole, and S. Nazare, lyeth a row of rockes called *Les Porceaux*, theſe come at halfe tyde aboue water: becauſe of them, and alſo more other ſhowlds, lying in the river, you muſt run all allongſt by the north ſhore, as is beforeſayd.

S. Nazare.

Les Porceaux.

Somwhat within S. Nazare upon the north land, ſtandeth a ſharp tower when that cometh without the ſouthland, then you cannot take hurt of the foreſaid rocks, run alongſt to the northwards of them, a litle to the eaſtwards of them lyeth another ſhowld of rocks, where men may run about to the eaſtwardes of it with great ſhips, it is there very ſhowld water alongſt to the poynt; being within the poynt, men may anckor as is ſayd in 6 or 7 fathom. To the eaſtwardes of S. Nazare lye two other villages, betwixt theſe villages it is very ſhowld and ſtony ground, there men muſt borrow over to the ſouther ſhore, but when you are halfe wayes to that eaſtermoſt village, then you may well ſaile on right with the poynt of the village, vntil you be paſt it, but againſt that eaſtermoſt village on the ſouth ſide, upon the poynt, lyeth a bank called Pynbuf, which lyes at leaſt halfe wayes over in the river, but men may run through betwixt the poynt and this bank in fiue or ſixe fathom, this is the rode for ſhips that are bound out to ſea

Pynbuf.

A league further in, in the midſt of the river, lye two ſtony banks in the fareway. At Pelerin is the lading place, two leagues from Nantes, where the goods is brought off with Lighters to the ſhips, but from S. Nazare to Nantes, or Pelerin, it is Pilots water, which men do commonly take in, by the abouenamed ſharpe tower called S. Nazare, where men (when they are within it) may ankor in 10 or 12 fathom, and ſtay for a Pilot.

Pelerin.

S. Nazare.

For to run into ſea from S. Nazare, alongſt to the ſouthwards of the rock with the hole, you muſt run firſt alongſt by the north ſhore, as is beforeſayd, untill that you come without the ſecond poynt of the River, edge then off from the north land to the middeſt of the river; and ſaile a good wayes about to the ſouthwards of Pierre-perce, when as you can

ſee the rock (which lyeth to the northwardes of Pierre Perce) without the poynt, there it is deepe foure fathom and a halfe, and when as Pierre-perce is northnorthweſt, and north and by weſt from you, then you come thwart of the rock, and there you finde deeper water, to wit, fiue, ſixe, and at laſt ſeven fathom, but when you come in the fareway of Pickeliers, then you get 10 or 12 fathom water.

Bankes before the Loire.

Before the river of Nantes lye many banks, but at halfe flood men goe over them, the ſouth poynt of the river of Nantes lyeth from the north poynt northnorthweſt and ſouthſoutheaſt foure leagues aſunder, to the ſouthwards of it, the land lyeth in with a great Indraught, and there men do run into the Bay. Theſe un-even bankes in the river of Nantes, are very unlike, ſometimes men ſound in fifteen fathom, and preſently afterwardes but ſeven or eight fathom.

Armentiers.

But to ſaile from Bell-Ile to the Bay or Armentiers, you muſt goe away e.ſ.e. vntill that you ſee the Abbey of Armentiers to the eaſtwardes of the trees, which ſtand vvithin the land over the ſame Abbey, then goe on eaſt, & eaſt and by north, ſo long vntill that the Abbey come within the caſtle of Armentiers, then are you within the Monke legge. Goe then againe e.ſ.e. untill that you bee vvithin the rock of Pierremen, you may goe about it on both ſides, and when that you can ſee the Graue open, then you may anckor in 7 or 8 fathom, and row a ſhore to fetch a Pilot, it is Pilots water. From Bell Ile to Armentiers, the courſe is eaſtſoutheaſt about twelue or thirteen leagues aſunder.

Pierremen

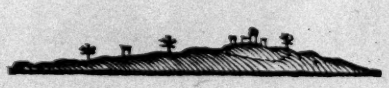
From Armentiers to Vſe, or Heys it is ſouth and by eaſt ſeven leagues, and from Bel-Ile to Vſe or Heys,, ſoutheaſt 16 leagues. The Iland of Piqueliers lyeth right before the poynt of Armentiers. Betwixt Armentiers or Piqueliers and Vſe, it is an un-even fareway, with many ſhowlds and bankes from 4,5,6, and 7 fathom. Vpon Vſe ſtandeth a ſharpe tower, and ſome little houſes or milles, vvherby it is very good to bee knowne. It is in the fareway betwixt Vſe and Bell-Ile 35 and 40 fathom, but when men are vvithin the fareway, it is 25 fathom deepe.

Piqueliers

Heys, or Vſe.

Vnder Vſe it is not very good riding, the ſea commeth alwayes ſo rowling in, as if the vvater came through under the Iland, at the north end it is ſhowld water, the road is, when the Church ſteeple is ſouthweſt from you, in 8 or 9 fathom; but men lye there not ſheltred but onely for a ſouth veſt and weſtſouthweſt vvinde, and it doth ripple there alwayes very much.

From Vſe to the Killiaets, or to the Iland of Saint Martens, the courſe is eaſtſoutheaſt, twelue or thirteene leagues. Betwixt both lyeth the Bearges of Olone about halfe a league off from the land of Poictou, and eaſt and by ſouth ſeven leagues from Vſe in the right fareway, and in regard that it is nothing but rocks & ſtones, therefore it is not good to come neere them in darke weather, men may ſayle round about them, and at low vvater they are uncovered. If you will ſayle from Vſe, unto the Killiaets, or unto the tayle of Aiſe, thorough vvithin the Baerges then ſayle on firſt eaſt, and beeing vvithin the Baerges of Olone, ſayle to the land of Poictou, vvhich lyeth from Olone to Saint Martens Iland eaſtſoutheaſt, and from Olone to the Piquiliers northweſt.



Thus ſheweth the Iland Vſe, or Heys, when you ſayl alongſt by it, being two leagues off from it.

Barges of Olon.

Olone.

Thus ſheweth the land of Poictou betwixt Heys and the Iland of S. Martens, when you ſayle alongſt by it foure leagues a ſeaboord the land.

Of the tydes.

ON theſe lands, as on all the Coaſts of Britaigne, a northeaſt and ſouthweſt moone maketh high vvater, and vvithin the havens, rivers and in-draughts, a point or two later, according as they lye farre vvithin the land.

rges of
on.

Duijtſche mijlen 15 in een graedt

Spaenſche mijlen 17½ in een graedt

Eng: en Fr: mijlen 20 in een graedt

De Kuſten van Vranckrijck tuſſchen Olone en de Rivier van Bourdeaux

Rochelle

Port Maran

Plom

Dam Bos

I. Tyvalenes Vrck

Lijſbon

Laverdin

Abdije

Isle de Ré

S. Martin

S. Maria

S. Martens Eylant

Keers

Kilhards

Portlus

Orbeſtier

Adige

Olone

D'Baerſé

P O I C T O V

Charante Aual.
Soubyse
S. Manise
S. Iean-d'Angeli
Dur de four
S. Nizare
Front
Steenbanck
Sester blanck
Hiers
Marennes
Sales
Oleron
Oleron.
S. Andre
S. Pierre
Mammefondt
Rivier van Bourdeaux
IGNE.
89

How theſe lands doe lye one from the other, and from other lands.

FRom the eaſt poynt of the Cardinall to Croſwyck e. n e. 5 leagues.
From the poynt of Croſwyck to Pierre-perce eaſtſoutheaſt 3 leagues.
From the Cardinal to Old-downes eaſtnorth-eaſt 7 leagues.
From the north poynt of the river of Nantes to the Picqueliers ſ.ſ.w. 7 leagues.
From Pierremen to Armentiers vveſtſouth-vveſt 2 leagues.
From Armentiers or Picqueliers to the vveſt end of Vſe ſouth and by eaſt, and ſouth-ſoutheaſt at leaſt 7 leagues.
From the eaſt end of Bell-Ile to Vſe ſoutheaſt eaſterly 16 leagues.
From Vſe to the Barges of Olone eaſt and by ſouth 7 leagues.
From Vſe to the Killiates, or S. Martens Iland eaſtſoutheaſt 12 or 13 leagues.

FRom Vſe to Cape de Pinas ſouthweſt and by ſouth 75 leagues.
From Vſe to Cape de Ortegall ſouthweſt and by vveſt 93 leagues.

CHAP. IIII.

The Coaſtes of Poictou and Santoigne, betvvixt Olone and the river of Burdeaux.

How to ſaile to the Killiates.

FROM Olone to the Killiates the coaſt lyeth moſt eaſtſoutheaſt foure or fiue leagues. For to ſaile into the Killiates, vvhich is in alongſt to the northwards of the Iland of S. Marten, in betwixt the foreſayd Iland and the maine land of Poictou, you muſt goe in ſomewhat more northerly then the middle of the channell, or leaue two third parts of the channell towards S. Martens Iland, and one third part towards the maine land. Alongſt by the Iland of S. Martens it is un-even, and ſomewhat full of bankes; come not too neere alſo the maine land, for there lye off alſo ſome bankes, but you may borrow of them by your lead. Goe in alongſt, as before is ſayd, untill that the Church of S. Martin be ſouthſouthweſt from you, then you ſhall be paſt the banck vvhich lyeth north from S. Martins, and lyeth off from the ſhore ſomewhat to the vveſtwardes of S. Martins, that is, a hard ſteepe ſtony banke, vvhich ſhowldeth up ſuddenly. For to avoyd it vvhen as you muſt turne to and againe vvith an eaſterly, or a northeaſt vvinde, you muſt not bring the little tower of Hars in the village of Loye, but vvhen the little tower of Hars commeth to the firſt, or northermoſt houſe of Loy, then you muſt caſt about, for then you come againſt the banck, vvhere remaineth at low vvater about a fathom depth, and at high vvater about foure fathom. When the foreſayd litle tower of Hars commeth againſt a mill vvhich ſtandeth at the ſouth end of Loye, then are you vvithin the banke, to vvit, betwixt the banke and S. Martins. When S Martins commeth to be ſouthweſt and by ſouth, and ſouthſouthweſt from you, then you may boldly ſaile over the end of the banke towardes S. Martins, you ſhall finde there at low water and Spring tyde at leaſt three fathom or ſixteene, or ſeventeene foote, alſo one caſt or two but twelue foote, then it is all ſoft ground, as alſo before S. Martins, but the bankes are hard, and with Spring tides there remaineth little water upon them. Before S. Martins you may ankor in foure, fiue, or ſixe fathom.

Markes of the bank before S. Martens.

For to ankor before S. Martens.

For to ankor before S. Martens, you muſt ankor ſo, that you may ſee open into the haven, and that the poynt of the Abbey, and the Boſſe doe ſtand the length of two capſtone-barres one from the other, there it is with ſpring tydes at low vvater three fathom and a halfe, but at high water ſixe fathom and a half deepe.

When you ſaile into the Killiates, as before is ſayd, it is twelue, eleven, and ten fathom deepe, but being come ſo farre that the tower of S. Martins beginneth to ſtand ſouthweſt from you, there it will be by little and little, ſhowlder, and then you may well edge towardes the Iland in fiue and foure fathom, it ſhowldeth then ſuddenly up, and will be from ten, quickly fiue, and foure fathom.

If you will goe over the bank that lyeth off from the Abbey with a ſhippe that draweth much vvater, then you muſt ſtay ſo long that it be halfe flood, for at low vvater there remaineth no more upon it then three fathom, or a foote or two more: when it is ſomewhat flowed, then you may well goe over with a great

ſhippe. When the litle tower of Luſſou commeth to the north end of the Iland Vrck, or Tivalenes, then are you upon the ſhowldeſt of the banck, but when the little tower commeth over the ſouth end of that litle Iland, then it beginneth to deepe againe.

The markes for to keepe the deepeſt water, vvhen you runne over the bancke, are theſe: keepe the great Tower of Rochell a handſpikes length to the ſouthwardes of the wood of trees, which ſtandeth upon the northermoſt high land, and runne ſo over the banck, it is there all ſoft ground.

If you will ankor before the Abbey within the banck, then runne into ſixe or ſeven fathom, and anckor there.

But if you will not anckor under S. Martens, but will ſaile forth towards Burnt-land, then bring that foreſayd little tower of Luſſou over the litle houſe that ſtandeth upon the little Iland Vrck, and keepe it ſo ſtanding, and then you can take no hurt of the Laverdyne

Laverdyn. The Laverdyn is a rane of rockes together a musket ſhot long, vvhich lyeth off from the eaſt poynt of S. Martens Iland, about an Engliſh mile, and with a ſpring at low water is uncovered. Betwixt it and the Iland of S. Martens men may ſayle through, there is depth enough. The markes of the Laverdyne are theſe: When you come in at the Killiats, and ſaile through betwixt Saint Martens Iland and the Boſſe, and you come to ſee the great Tower of Rochell even without the poynt of the Boſſe, then are you right thwart of the Laverdyn, vvhich lieth then ſouthweſt from you, it is there betwixt them both not very wide: or els when the foreſayd great Tower of Rochel ſtandeth even without the poynt of Boſſe, and the north poynt of the Plom a ſhippes length without the ſouth poynt (which is the north poynt of the Boſſe) then are you right vpon the Laverdyn, therefore when Rochell commeth a ſhippes length to the ſouthwardes of the Boſſe (vvhen you come in at the Killiats) then are you paſt the Laverdyn, and you may boldly goe on ſoutheaſt, and ſoutheaſt and by ſouth towardes Burnt-Iland.

Porthus. Porthus is a broad and wide channell, lying in through betwixt S. Martens Iland and Oleron, and lyeth from Vſe ſoutheaſt and by eaſt diſtant about fifteen leagues. If you will ſaile into Porthus, then runne in betwixt both lands eaſtſoutheaſt, but much neerer S. Martens Iland, for to avoyd the Band of Oleron, which is a fowle ledge of rockes at the north end of Oleron, come no neerer it by night then in twelue or thirteen fathom.

When you come then by the eaſt end of S. Martens Iland, & are bound to Rochell, or els will ankor under the Boſſe, bring the great Tower of Rochell a ſhips length without the Bos, ſo you can take no hurt of the Laverdin. You may anckor under the Boſſe in 5 or 6 fathom ſoft ground, ſo that the poynt doe lye north from you. Or els if you will ankor under the Abbey of S. Martens Iland, then run in upon the foreſayd markes, ſo long untill that the foreſayd Abbey come without the ſouth poynt of the ſame Iland, ſaile then right with it, and then you ſhall leaue the Laverdyn farre enough on the larboord ſide of you. And being come neere the Abbey, anckor a little to the eaſtwardes of it in 5, 6, or 7 fathom, there is the road for ſhippes that are bound out.

When you ſayle into Porthus, and will goe to the Burnt Iland, then runne in (as before is ſayd) until you come neere the eaſt end of S. Martens Iland: from thence the courſe is ſoutheaſt & by eaſt, or from the Boſſe ſouth or ſouth and by eaſt, or with a weſterly winde ſouth and by weſt unto that Iland. Burnt Iland.

When you ſayle ſo neere that Burnt Iland that the tower of Voorn, or the Four, commeth over the Burnt Iland, there you may caſt your ballaſt over boord, it is there twelue fathom deepe.

If you muſt turne to and againe with a ſoutherly winde from the Boſſe to the Burnt Iland, or from Burnt Iland to the Boſſe, then come not too neere to the land of Rochell, there lye divers ſtony banckes alongſt the the land, a good wayes from the ſhore, whereof you muſt take heed. When Rochell is hidden behinde the ſouth poynt which lieth over againſt the Creeke, there lyeth a ſtony bank, upon vvhich remaineth not a fathom of water.

If you will ſaile into the River of Sherrant, then runne about to the ſouthwards of Burnt-Iland, you may alſo ſaile about to the northwardes of it, and ſayle in by the Tower of Voorne, or Four. At low water this river falleth dry, at leaſt foure leagues within the land. For to ſayle from Burnt Iland to Burwage, you muſt ſayle away ſ. ſ. e. and keepe the little tower of Heers to the weſtwardes of the wood, ſo long untill the tower of Voorn or le Four, come over the litle red tyled houſe, that ſtands upon the ſouth ſide of the river of Sherrant, ſaile then in ſoutheaſt, and by little and little ſoutheaſt and by eaſt, untill that Front (a village that lyeth upon the ſtrand) commeth to the northwardes of Soubiſe, vvhen as then Soubiſe commeth within the foreſaid village,

and

and the mill aboue the village, then you ſhall be againſt the poynt of the Oyſter-banck, go then in alongſt ſoutheaſt and by ſouth, and bring that outermoſt litle tower of Heers, over the outermoſt ſandy place, where the gallowes ſtandeth by, keepe them ſo ſtanding, and ſaile in ſouth-ſoutheaſt, when as then the litle tower of Heers commeth to the eaſt ſide of the valley which is in the wood, then keepe that ſharpe little tower right over the eaſt ſide of the valley of the wood, and ſaile in ſo into the Creeke, or river of Burwage. At Burwage was wont not to ſtand a houſe, where now is a ſtrong faire towne, being builded ſo within ſeventie or eightie yeares paſt.

Oyſter-banck.

Baniard.

The Banniard lyeth alongſt the land of Oleron, and lyeth untill within Burnt Iland, at low water it is uncovered, and the taile of it lyeth farre to the northwardes. If you ſhould turne out from the Creeke towardes the Burnt-Iland, then bring the Tower of Rochell not without the Burnt Iland, before you come thwart of it, becauſe of the Baniard, and then you ſhall take no hurt of it.

At the ſouth end of Oleron, betwixt Oleron and the land to the ſouthwards of it, is yet another channell, where men may ſaile in and out, called the Mamme-ſound, deepe enough for great ſhippes, it lyeth in from out of the ſea eaſt and by north: being come therewithin, there runneth up a river ſoutheaſt towardes Sales, where men doe lade Salt, being paſt that, to the other poynt of the Mamme-ſound, lyeth a plate, whereof men runne to the northwardes upon theſe markes: you muſt keepe the mill that ſtandeth upon the land of Oleron over the trees,

Mamme ſound.

and ſo you ſhall runne to the northwardes of the Plate, there is the road for them that will lade ſalt at Oleron or Olderdon.

But if you will runne in through, and out againe, then you muſt ſayle ſo farre to the eaſtwardes, vntill that Sales come over the trees, which ſtand within Merven, for to avoyd the tayle or riffe that ſhooteth off from Oleron: when Sales commeth over the trees, ſayle then north and by weſt on, to the Burnt Iland, but bring Duke Charles tower to the ſouthwardes of the Burnt Iland, for not to ſaile within the Baniard. When the litle Tower of Heers commeth to the wood, keepe it then ſo ſtanding untill that Rochell commeth over the north ſide of the Burnt Iland, ſaile then out at the Porthus. There ſhooteth off alſo a riffe from the weſt end of S. Martens Iland, whereof you muſt take heed.

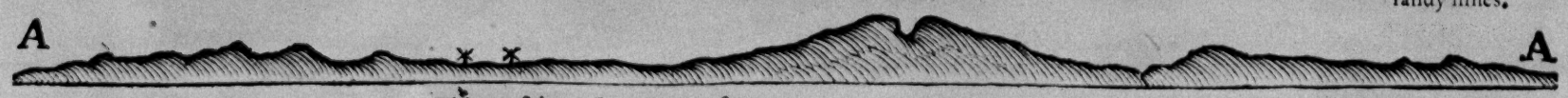
Riffe at S. Martens Iland.

About ſouth, or a litle more weſterly, thirteen leagues from the Iland Vſe, ſouthweſt and by weſt from the Iland S. Martens, and w.n.w. or ſomewhat more northerly from the river of Burdeaux, lye the rockes of Rockedon, or Rochebon, of ſome called Vrkamia, in forme of a Trevet or Brandize. The ſouthermoſt of the three is the ſhowldeſt, whereupon remaineth at low water about two fathom depth: at the ſouthweſt ſide the ground is black little ſtones, and at the northeaſt ſide white ſand, but you may not come neere them by your lead, to ſound by them.

Rockes of Rochebon.

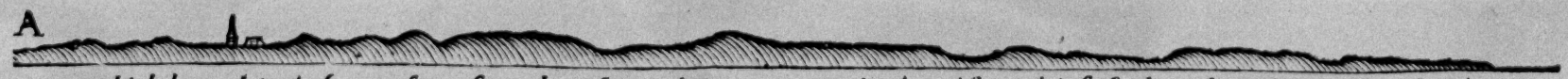
A little to the weſtwards, not farre from the foreſayd rocks, lyeth yet another rock, whereupon is at low water fiue fathom water, nevertheles with a ſtorm the ſea breaketh terribly upon it.

Hovv these lands do shevv themselues at sea.



This coast lyeth southsoutheast.

Thus sheweth the west end of the Iland of S. Martens.

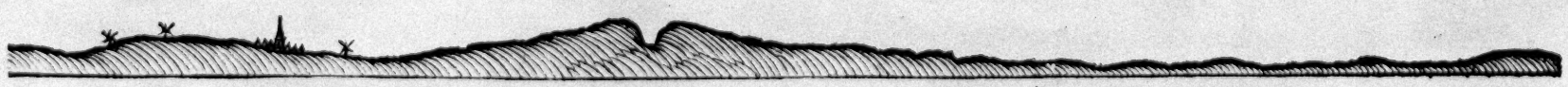


This belongeth to the former figure from the west end of S. Martens Iland, and sheweth it selfe thus when the steeple is east and by south from you three or foure leagues off, the coast lyeth here eastsoutheast and westnorthwest.

When S. Martens Iland is north and by east from you, it sheweth it selfe thus.

When men saile out or in at Porthus, S. Martens Iland sheweth it selfe in this forme.

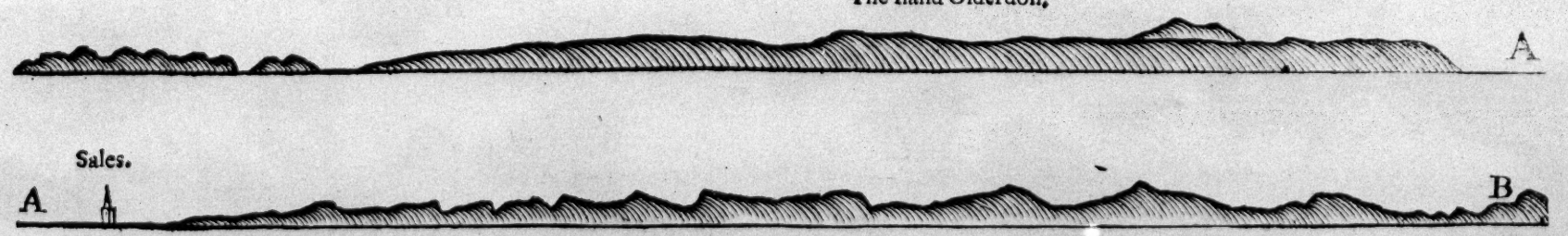
Thus sheweth the south side of S. Martens Iland, when the tower or west end is north, and the east end northeast three or foure leagues off from you.



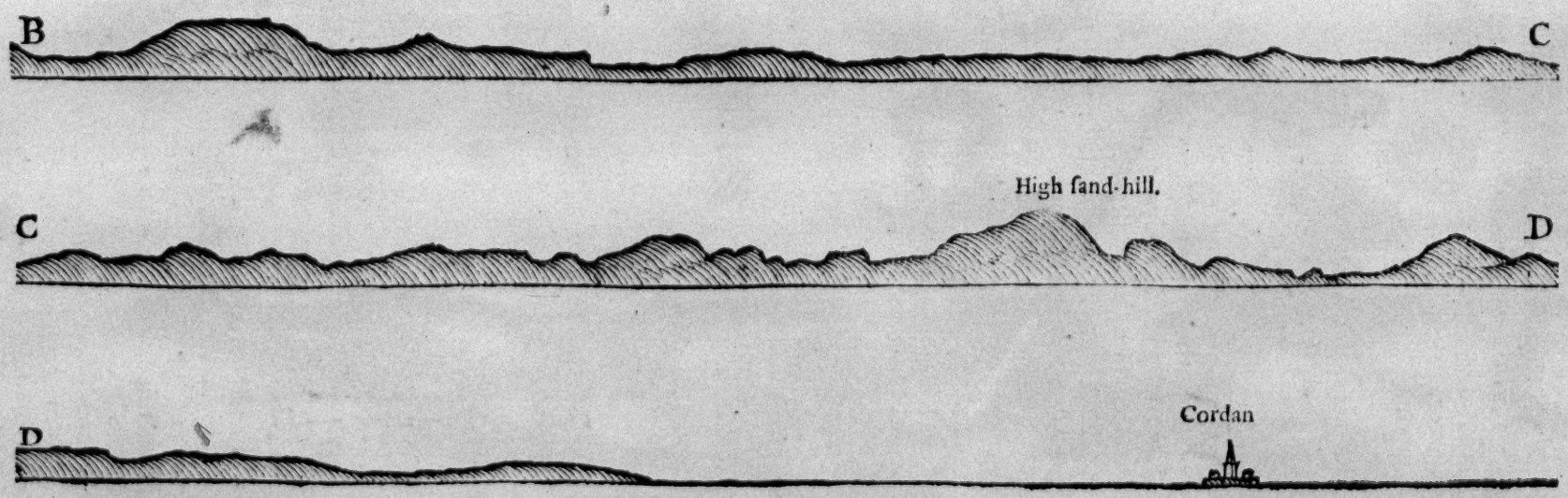
The west poynt of Oleron, or Olderdon sheweth it selfe thus, when it is east from you two great leagues. There abouts it twenty fathom deepe.

When you are b fore Porthus about two or three leagues from land, then doth Oleron or Olaerdon arise in this forme.

The land betwixt Olderdon and the river of Burdeaux sheweth (when men saile alongst by it) as is portrayed in these fiue following figures, the letters of one sort belong one to the other, as A A, B B, C C, D D.



Thus sheweth Sales when it is east and by north from you, being about a league without the land.



Of the tydes.

ON theſe coaſts and Ilands a ſouthweſt and northeaſt moone maketh high water, within the havens and rivers a poynt or two latter, according as they lye farre within the land.

Of the depths thwart of theſe lands, and in what depths men may ſee them, and by what marks men may know them.

VVIthout Vſe it is 35 fathom deepe, and then men may ſee the land from below: when it is cleare weather men may ſee it in ſixtie fathom.

The land of Olone men may ſee it from below in 25 and 30 fathom.

S. Martens Iland and the north end of Oleron men may ſee in 28 and 30 fathom. When men get ſight of S. Martens Iland, they ſhall ſee upon it a high tower, with a high houſe, and upon the ſtrand a mill with foure or fiue high ſand-hills. Vpon Oleron men ſhall ſee a high ſpire tower upon a red poynt, where men ſhall ſee ſome trees ſtand over it, and to the ſouthwardes of it is at two or three places ragged ſand-hilles.

How theſe lands doe lye one from the other, and from other lands.

FRom Vſe to S. Martens Iland, or the Killiates, the courſe is e.ſ.e. 12 or 13 leagues.
From Vſe to Porthus, or the Band of Oleron the courſe is ſoutheaſt and by eaſt 15 or 16 leagues.
From the Band or Craghe of Oleron to the tower of Cordan ſ.ſ.e. and ſouth and by eaſt 13 leagues.
From S. Martens Iland to the tower of Cordan or the river of Burdeaux ſ.ſ.e. 16 leagues.
From S. Martens Iland to C. de Pinas ſouthweſt 80 leagues.
From S. Martens Iland to Ortegall, the courſe is w.ſ.w. ſomwhat ſoutherly 99 leagues.

Heights of theſe landes.

THE Iland Bell-Ile lieth in 47 deg. 50 min.
The Iland Vſe in 46 deg. 48 min.
The midſt of S. Martens Ile in 46 deg. 26 min.
The north point of Oleron in 46 deg. 15 min.

CHAP. V.

The Deſcription of the river of Burdeaux, and the haven of Arcachon.

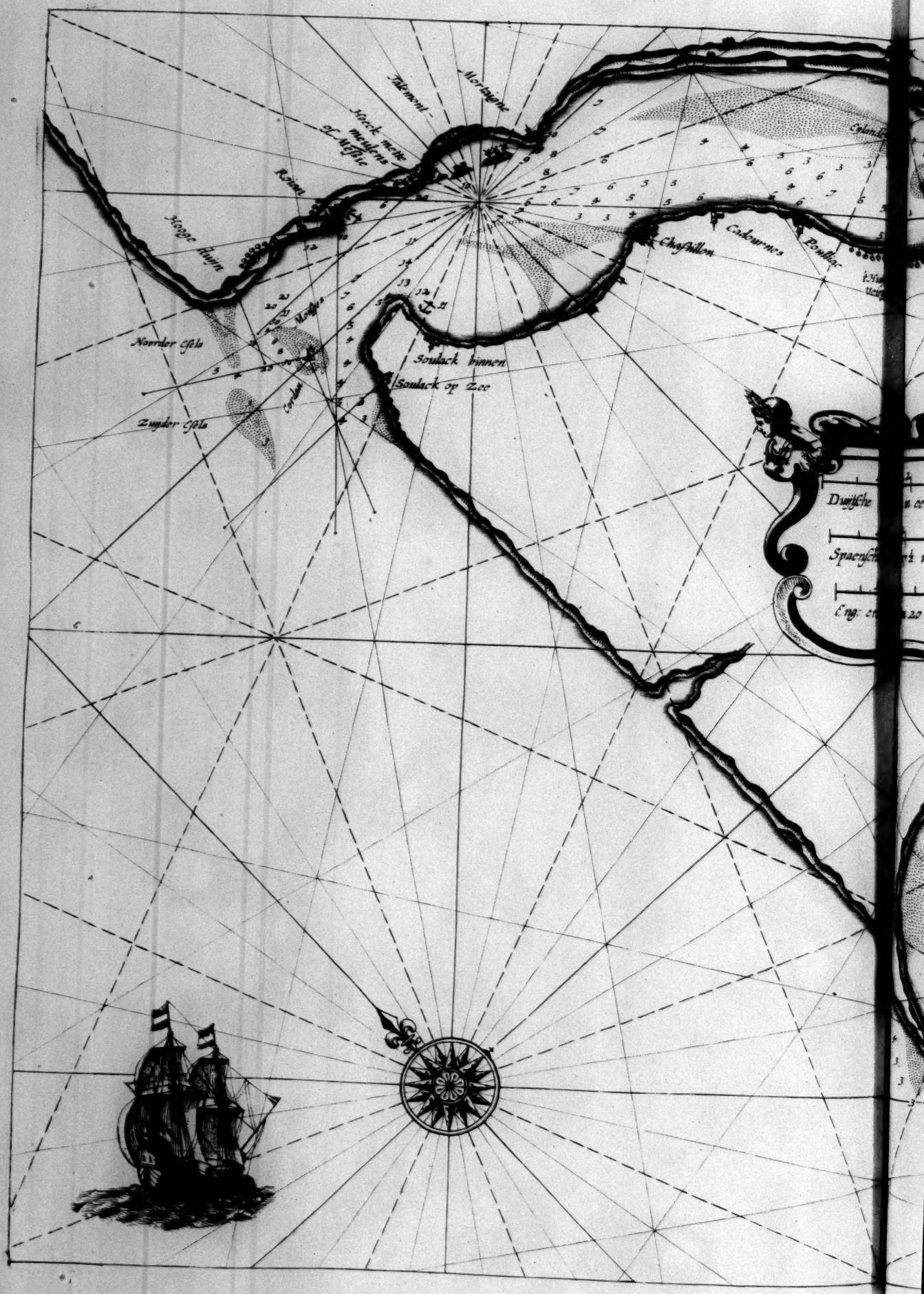
FROM the Band or Craghe of Oleron to the Tower of Cordan, or the Pole-head, or the mouth of the river of Burdeaux, called the Garonne, lieth the land ſoutheaſt and ſoutheaſt and by eaſt 13 leagues.

To the northwardes of the mouth of the river of Burdeaux, lye fiue or ſixe high white ſand-hilles, but to the ſouthwardes of it, it is ſomewhat low land, black litle ſandhills, being growne with ſpiry graſſe.

From the Tower of Cordan off to the northwardes, towardes the high ſand-hilles which lye upon the northland, lyeth a ſand-
Piper. banck called the Piper men may ſound alongſt by it on the weſt ſide in ſeven fathom, but upon the north end it is very ſteepe, and not farre off it is twenty fathom deepe.

From the north poynt of the River runneth off to the ſouthwardes, a ſand called the Norther Aſſes, and to the ſouthwardes of it lyeth another ſand called the ſouther Aſſes, through betwixt them both, and alſo alongſt to the ſouthwardes of them men ſaile into the river. Norther and ſouther Aſſes.

If you will ſaile into the river coming from the northwards, then you may run alongſt by the ſhore in 12 and 13 fathom, untill that the tower of Cordan ſtand ſoutheaſt and by eaſt from you, run then right in with it, through betwixt the norther and the ſouther Aſſes, vntill that the high white ſand-hill upon the north poynt of the river ſtand n.n.e. from you, men may ſo (comming from the northwards) run in alſo about by the norther Aſſes, by your lead, untill that the tower come to be ſouthſoutheaſt, and ſoutheaſt & by ſouth from you, then goe towardes the tower, and when the foreſaid high ſandhil cometh to be n.n.e. or northeaſt and by north from you, ſaile then right in with it, untill that you haue the ſounding of the land, run then in alongſt by it towardes Meſſie, that is the poynt where all Meſſie.
the milles ſtand. When you ſhall ſaile thus towardes the high ſand-hill, and that the tower of Soulack commeth a great fathom to


Talmont
Noirtoyghe
Roiant
Hoogte Huvin
Noorder cßle
Zuyder cßle
Soulack binnen
Soulack op Zee
Chaffillon
Cadournes
Pouillac
Duytsche
Spaensche
Eng:

Blaije
Roche de tou
Bourg
Dordoigne flu.
Vier huijsen
Lermond
Noublot oste Duyvecot
Sertroijse
Duijvels huijs
't Kasteel Chasteau
Bourdeaux
Haven van Arcachon
Caarte Van de Rivier van Bourdeaux en de haven van Arcachon.
90

Royad. the northwards of the tower of Cordan, and the litle mill of Royan come in the wood by Royan, then are you alſo paſt the Piper, and may run in right eaſt without feare towardes Royan, but you muſt reckon well your tyde, for the flood falleth thwart over the Aſſes towards the tower of Cordan, and the ebbe to the contrary. In this foreſaid chanell through betwixt the Aſſes remaineth at low water three fathom water upon the ſhowldeſt.

For to ſaile into the river alongſt to the ſouthwardes of the Aſſes, comming from the northwardes, (that is, the beſt channell) you muſt doe thus: Bring the tower of Soulacke eaſt from you, or ſomewhat more northerly, and ſaile in ſo right with it, untill the tower of Cordan be north & by eaſt, and northnortheaſt from you, Royan ſhall then ſtand northeaſt from you, or els if you come from the ſouthwardes, then bring the Tower of Cordan north and by eaſt, and northnortheaſt from you, and ſaile in ſo right with it, untill Soulack come to be eaſt from you, Royan ſhal then ſtand northeaſt from you, ſaile then right towardes it, and comming neere it, ſaile to the poynt of Meſſie.

When you are now within the rivers mouth, and come right againſt the poynt of Meſſie, that is the poynt where the mills ſtand upon, then edge over towardes the broken Caſtle Chaſtillion called Chaſtillion, ſoutheaſt and by ſouth, that is, eight leagues from Meſſie, and then forth in alongſt by the ſouth land, ſoutheaſt in Pouliack. unto Pouliack, which is two great leagues.

In the fareway betwixt the Piper and the poynt with the milles, or Meſſie, it is ten, eleven, and twelue fathom deepe; but out of the fare-way, either on the north ſide, or ſouth ſide, it is ſhowlder, to wit, fiue, ſixe, ſeven, and eight fathom, you muſt runne alongſt cloſe by the poynt of Meſſie, there it is 22 fathom deepe.

When as that Royan commeth to the weſt poynt whereupon the milles ſtand, keepe it ſo ſtanding, and goe away ſoutheaſt and by ſouth towardes Chaſtillion, it is in this fareway almoſt all alongſt fiue fathom deepe, but comming neere the north or ſouth ſide, it is ſhowlder, and at the north ſide it is full of ſandes, where alſo men may well ſaile through that are acquainted.

Pouliack. From Chaſtillion to Pouliack it is 2 great leagues ſoutheaſt, the courſe is as before is ſayd, and it is there deepe 4, 5, 6, and 7 fathom. Over againſt Pouliack in the middeſt of the river lyeth a little Iland to the eaſtwardes, men muſt runne about it, right in with Bloye, but there men muſt goe over with the tyde, for it is there at low water but a litle more then one fathom deepe.

When you are before Pouliack, and will ſail to Bloye, then let the water firſt flow an houre, and then you may well goe over with a ſhip that draweth nine or ten foote water. The markes for to ſaile alongſt in the deepeſt water of this reach, are theſe: there ſtandeth a mill halfe wayes betwixt Bloye and Rocketaw, keepe that without the new wall of Bloy, and then you ſhall run in the deepeſt of the channell.

Before Bloye it is againe three or foure fa- Bloye. thom deepe, run then alongſt by the northland in three, foure, and fiue fathom. When you come before the River which lyeth up to the eaſtwardes called Dordoigne, then ſaile firſt right with the middeſt of the ſecond Iland, and leaue it on the ſtarbord ſide, and go indifferent neere alongſt by it, untill that you be over againſt or paſt the gallowes, which ſtandeth upon the eaſt poynt of the river: and then again alongſt by the northland unto the foure litle houſes. From thence you muſt edge over to the high tower of Dublot or Pigeonhouſe, coming thwart of it, you muſt preſently edge over again to the eaſtſide, to the bight neer Lermondt; in that edging over you ſhall run through betwixt a ſtone-bank on the larbord ſide, and a ſhowld ſand-plate on the ſtar- The Pace. boord ſide, over a bank called the Pace, which is the ſhowldeſt of all the river, there remaineth at low water a litle leſſe then a fathom. Being come over the Pace to the eaſt ſide, go then in alongſt by the eaſt ſhore, untill you be paſt Lermondt, then ſaile againe over to the weſt ſide, right with the houſes of Charterhouſe, and then in all alongſt by the weſt ſhore, vntill you come before the towne of Burdeaux, in that crooked reach betwixt Lermondt and Charterhouſe it is fiue, ſixe, and ſeven fathom deepe, and before the towne foure and fiue fathom.

When men will ſaile out of the river of Burdeaux, they muſt ſtay at Royan untill they haue good weather, and a fore-ebbe to runne out with: in running out, keepe the high ſand-hill northnortheaſt from you, ſo long untill that the tower of Cordan be ſoutheaſt and by eaſt from you, then you may ſayle out through the Aſſes northweſt and by weſt into ſea.

From Cordan, or the river of Burdeaux, unto Arcachon, the coaſt lieth ſouth and north twenty leagues, it is all low ſandyland, betwixt them both lyeth a tyde-haven called Anchiſes, men may goe in there well at high water with great ſhippes.

Arcaſon. Before the haven of Arcachon, or Accaſon, lye three litle Ilands, men may ſaile in to the northwardes of them, and alſo in to the ſouthwardes of them: the norther entry goeth in betwixt the north poynt and the northermoſt Iland, but it is narrow and not deepe. The ſouther entry lyeth to the ſouthwardes of all the Ilands by the ſouther poynt, in betwixt two ſhowld ſand-banckes, whereof the one lyeth off from the ſouthermoſt Iland, and the other from the ſouth poynt of the main land, ſouthweſt and by weſt into ſea. The land to the northwardes of this haven is altogether ſomwhat low ſandy land without trees, but to the ſouthwardes of it there are all ſomewhat high ſand-hils without trees alſo, but coming before the havens mouth, you ſhall ſee within in the land many trees. When you come out of the ſea either from the northwardes or the ſouthwardes, neere about this havens mouth, you ſhall eaſily eſpie the foreſayd banckes on both ſides of the ſouther entry, by the breaking of the ſea, and you may borrow of them by your lead, as neere as you pleaſe, they are very cleane and flat. Vpon the ſandhils within the havens mouth, ſtand two great high maſtes. If you will ſaile in there, then bring the two maſts one in the other, and then they ſhall ſtand northeaſt and by eaſt from you, keepe them one in the other, and ſaile in ſo right with them, and you ſhall ſo ſaile in betwixt the two foreſayd bankes, and at low water you ſhall not finde leſſe then two fathom water, but at high water you ſhal haue fiue, fiue and a halfe, and ſixe fathom water, goe in ſo upon the markes, untill you come within the Ilands, and to the end of the ſhowld ſand on the larboord ſide. Being gotten in within it, you muſt luff up about by it, and goe then on north untill you come to the point, which you ſhall ſee on the ſtarboord ſide, but giue that a birth becauſe there runneth off a taile: there is in that reach not leſſe then ten, eleven, or twelue fathom deep. Being come about that poynt, you may then ſaile in cloſe alongſt by the land on the ſtarbord ſide, which lyeth eaſtſoutheaſt, or you may anckor there in ſixteen, fifteen, twelue, and ten fathom, or further in about the ſecond poynt in two and three fathom Over againſt the firſt point, on the north ſide, it falleth very farre dry, a great wayes within.

For to ſaile into the haven of Arcaſon.

Of the tydes.

LIke as on all the coaſtes of France, ſo alſo at the mouth of the river of Burdeaux, maketh high water a ſouthweſt and northeaſt moone.

Of the depths.

THE land againſt the River of Burdeaux men may ſee from the poop in 30 fathom, and the Tower of Cordan in 27 fathom.

Courſes and Diſtances.

FRom Cordan to Arcaſon ſouth 20 leagues.
Frō Arcaſon to Bayone ſouth 16 or 17 leag.
From the Tower Cordan to Cape de Pinas w.ſ.w. ſomewhat ſoutherly, 75 leagues.

Heights.

THe Tower of Cordan lyeth in 45 degrees 45 minutes,
Arcaſon in 44 degrees 40 minutes.

De
Zeecuſten van
Vrancrijck en Biſcaijen
tuſſchen Arcachon en de
C. de Machicaco

B I S C A I E N

V R A N C R I J C K

Fontarravia

S. Anna

S. Jan de Luz

Pinas de
S. Anna

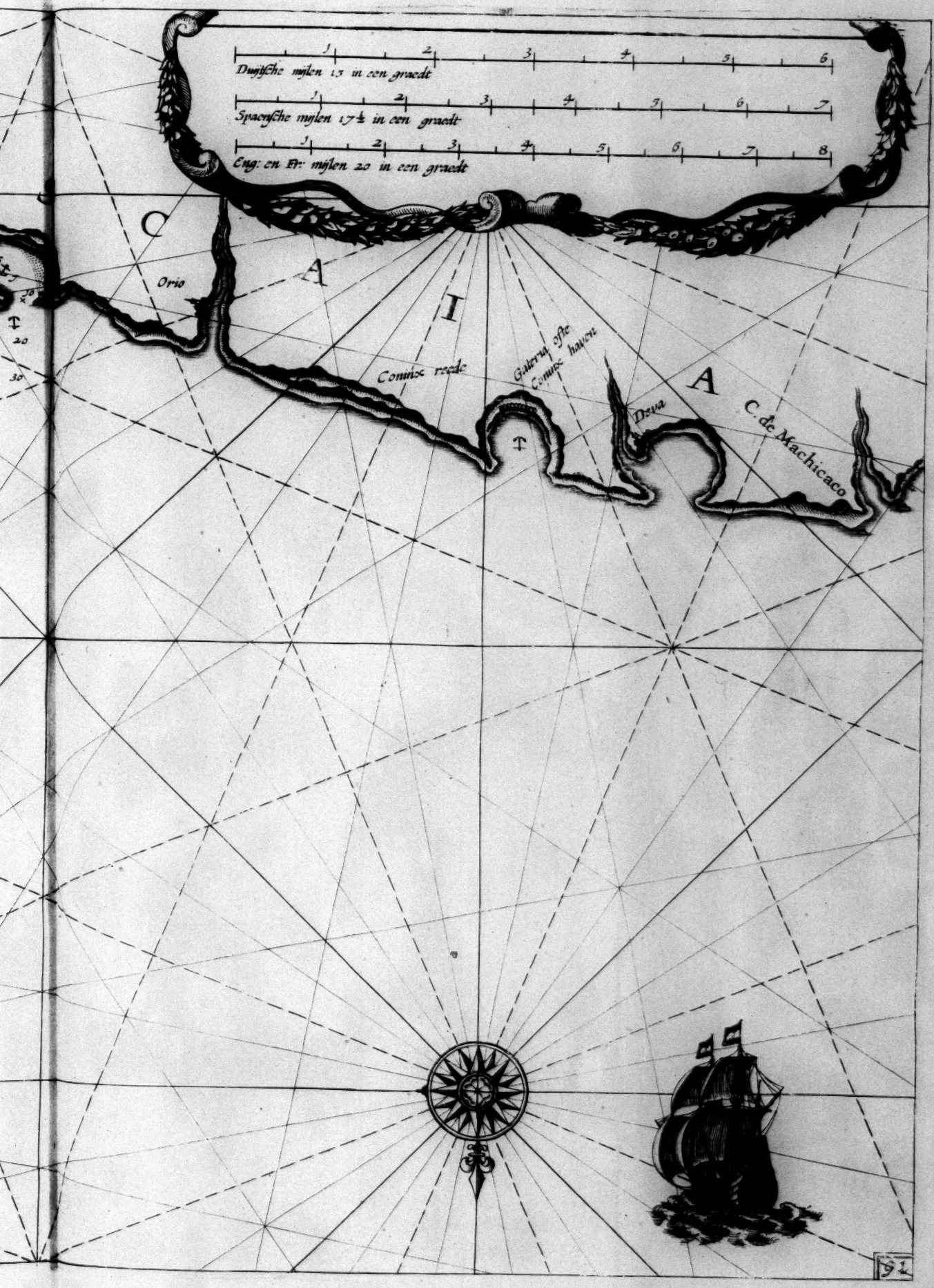
C. Figuer

Bayonne

Cabuton

Bay Soye

S. Sebaſtiaen


1 2 3 4 5 6
Duytsche mylen 15 in een graedt
1 2 3 4 5 6 7
Spaensche mylen 17½ in een graedt
1 2 3 4 5 6 7 8
Eng: en Fr: mylen 20 in een graedt
C
A
Orio
I
Coninx reede
Galera oste Coninx haven
A
Deua
C. de Machicaco
20
30

CHAP. VI.

The coaſts of France & Biſkay, betvvixt Archacon and the Cape de Martinchaco.

Bayone. FROM Arcaſon to Bayone the coaſt lyeth ſouth and north ſixteene or ſeventeen leagues. The Rivers mouth of Bayone lyeth in betwixt two plain ſtrands eaſtſouth-eaſt, and eaſt and by ſouth, and ſometimes more eaſterly or northerly, by reaſon of the ſhifting and altering of the ſands before the rivers mouth. Vpon the land on the ſouth ſide of the channel, ſtand two maſts, theſe you muſt keepe one in the other, or the innermoſt a little to the northwardes of the outermoſt, and runne ſo in over the Barre or ſhowldeſt place, untill you come againſt the ſouth poynt, and then in alongſt by it. Vpon the foreſaid Barre is at high water and Spring tyde, at leaſt three fathom, with an ordinary tyde two fathom and a halfe, but at low water no more then three foote water. When you come about the poynt, you muſt ſaile up to the ſouthwards, keeping about the middle of the channell alongſt the river, or rather neereſt the weſt ſide, for to avoyd ſome fowle ground and ſhowlds, that lye on the eaſt ſide, and anckor before the towne in foure, fiue, or ſixe fathom. This Barre and this River is Pilotes water.

A litle within this Barre on the north ſide of the river lieth up to the northwards, a great water within of ſeven leagues long, and falleth out into ſea by Cabritton. Alongſt that great water the ſhips were wont to ſaile up to Bayone, but it is now upon the ſouth end at the river of Bayone, almoſt altogether paled to, ſo that there can but ſmall barkes goe thorough, for to keepe the better the Barre of Bayone deepe with ſcowring through of the water.

S. Iohn de Luz. From the Barre of Bayone to S. Iohn de Luz, the courſe is ſouth and by weſt 4 leagues, there is a faire Bay, where men may ride in fiue, ſixe, ſeven, or eight fathom, according as they will lye farre in, cleane ſandy ground, at the end of the Bay is a litle tyde-haven, where upon lyeth the towne on the weſt ſide. At high water, and with on ordinary tyde, there commeth nine foote, but with a ſpring twelue foote water, at low water it falleth altogether dry, ſo that men may goe over there with dry feete. A little within the weſt poynt of the Bay is alſo a litle Dock, where there is a foot water more then in the foreſayd tyde-haven, but it falleth alſo dry at low water.

This Bay is very good to know by theſe marks that hereafter are written; It lieth right in the Bight, to the eaſtwardes of it lyeth the land north and by eaſt towards Bayone, and to the weſtwardes of it the land falleth away ſouthweſt and by weſt, and ſouthweſt towards Fonteravia. Vpon the eaſt point of the Bay ſtandeth a white Fire-tower, which men may ſee farre off, eſpecially when the Sunne ſhineth upon it, then it ſhineth very white more then the other land. Vpon the weſt poynt ſtandeth a flat white houſe a litle wayes upon the high land, and to the weſtwardes of the Bay it is upon the ſea ſide gray and blewiſh land. Alſo the high hill of S. Iohn de Luz, is a good marke for to know this Bay, which remaineth in ſailing in, lying ſomewhat to the eaſtwardes, or on the larbord ſide. This foreſayd hill of S. Iohn de Luz ſheweth it ſelfe out in height aboue all other hilles thereabouts, and thereby is very good to bee knowne: aboue upon the top it is ſomewhat flat, as is demonſtrated in the riſing of the lands. Vpon this foreſayd hill ſtandeth a Chappell, from whence men may ſee into foure kingdomes, France, Spaine, Navarre, and Arragon.

About two leagues ſouthweſt and ſouthweſt and by weſt from S. Iohn de Luz, lye the rocks called the Pignons of S. Anna, not farre from land: a league to the weſtwards of them, lyeth the Bay of Fonteravia, being a faire Bay. Pignons of S. Anna.

At the weſt point of the Bay lieth the C. Figuer, a high point, upon it ſtandeth a caſtle, and to the ſouthwards of it a litle chappell. At the poynt of this cape lieth a rock a litle wayes from it, but the ſea cannot runne through betwixt them, except it be with very high floods, it breaketh a litle through. At the eaſt ſide of this bay lye two high rocks, & thwart of them lye alſo ſome low rocks a good wayes off from the land. For to avoyd them, you muſt ſaile in by the weſt point for to come into this Bay, and being within it, you may anckor in eight or nine fathom, but ſo that the foreſayd great rock at the C. Figuer ſtand northnorthweſt from you, there you lye in faire ſandy ground, and landlockt for a northweſt winde. The Kroonenbergh lyeth about halfe wayes betwixt S. Iohn de Luz and this foreſayd Bay of Fonteravia. Kroonenbergh.

A litle league to the weſtwards of C. de Figuer, lieth Paſſage alſo a faire haven. At the weſt ſide of the havens mouth, which is very narrow, lyeth a round rock, ſo that it is evill to come in there with an ebb, but with a flood it is better, without it is very cleane, without Paſſage.

any ſhowlds or fowle grounds, but onely the foreſayd round rocke. The towne lyeth a litle within the haven on the weſt ſide, where men doe lye before it in 7 fathom.

Two great leagues to the weſtwardes of Paſſagé, lyeth S. Sebaſtians, betwixt both is alſo a ſand-bay in a bight, where there goeth up into the land a ſhowld little river, where come in many barkes.

S. Sebaſtians. The haven of S. Sebaſtians is good for to come into, men doe runne in there betwixt two litle caſtles, whereof the eaſtermoſt is the greateſt, ſtanding upon a high hill. The weſtermoſt is a litle ſquare tower, and lyeth upon a little Iland, or rock. In the havens mouth being narrow, betwixt the two foreſayd little Caſtles, lyeth a rocke, which at low water is ſixe fathom deepe, and when it is a ſtorme out of the ſea, it breaketh alwayes upon it, and lyeth neereſt the eaſtland, by the weſtland it is deepe ten fathom. Now for to avoyd the foreſayd rocke in comming in, there commeth an Abbey to the eaſtwards of the weſtermoſt Iland, and a little tower. If you keepe them one in the other, then you run in to the eaſtwards of it.

For to anckor without S. Sebaſtians in the road, you muſt keepe the high hill which lyeth upon the poynt of C. Figuer, without the foreſayd eaſtermoſt caſtle, there you may anckor, but if the ſame come to be hidden behind the caſtle or Iland, then you may not anckor in the road of Saint Sebaſtians. When you are come through the narrow within the rock and the caſtles, then you may anckor at the eaſt ſide under the great caſtle, there is the beſt road. Within the foreſaid caſtle goeth up a litle water, men may goe at low water a foot from the eaſter caſtle alongſt a high ſtrand upon the maine land, unto the towne, which lyeth behinde the foreſayd high hill with the Caſtle, yet the ſtrand at high water is covered; it is a bay, and within before the towne it is deepe fiue, ſixe, and ſeven fathom; at the weſt ſide under the litle Iland, men may not ankor, becauſe it is flat & ſhowld there.

He that will goe forth from thence into S. Sebaſtians, let him run in, keeping the middle channel, betwixt the two Ilands, and let him leaue the litle Iland whereupon the chappell ſtandeth on the ſtarboord ſide, running in ſo right againſt the firſt or the ſecond wall of the towne, and anckor there, the boats or ſhallops ſhall come aboord of him, and helpe him into the hauen betwixt the walles.

A league to the vveſtwardes of S. Sebaſtians, lyeth a ſand-bay, where men may anckor ſo deep and ſo ſhallow as they will.

From S. Sebaſtians to C. de Martinchaco the courſe is w.n.w. 13 leagues. Betwixt them both lye the roades Gateria add Deva.

Gateria. Gateria lyeth from S. Sebaſtians weſt and by north, and w.n.w. diſtant eight leagues, being a faire round ſand-bay, where is good riding for weſterly vvinds, men lye there vvithin the vveſt poynt right before the towne, in faire ſandy ground, a north vvinde commeth right from the point. This Bay is cõmonly called Kings haven.

Alongſt the coaſt of Biſcay, betwixt S. Iohn de Luz and Gateria is every vvhere clean ground and good ankoring in 20 fathom.

From Gateria to Deva it is a league and halfe to the vveſtwardes: which is an off-water that commeth out of the high land.

Two leagues to the vveſtwards lieth the point of C. Martinchaco.

Of the tydes and courſe of the ſtreames.

ON theſe coaſtes likewiſe, as on the former, men find no courſe of ſtreams, but a ſouth-eaſt and northweſt moon maketh in every place on theſe coaſtes the higheſt vvater, and vvithin the rivers a point later.

Of the depths thwart of theſe lands.

BEtwixt Arcaſon, & S. Iohn de Luz, men may ſee the land in 30 fathom, vvhen men are about Bayone, they ſhall ſee Cabritton, Bayone, Bedert, and S. Iohn de Luz, almoſt all flat towers.

Being before Paſſage, men may ſee alſo the poynt C. Figuer, and S. Sebaſtians, the land lyeth in there with a great Bay.

About C. de Figuer lyeth a high hill, which at the ſouthweſt end is very ſteepe, and goeth very long ſloping down towardes the north.

When men are before Saint Sebaſtians 7 or 8 leagues without the land, then it riſeth ſomwhat long, and at the weſt end ſteepe and hollow, but when men come cloſe by the land, then it is very high and ſteepe.

When men are 8 leagues without S. Sebaſtians, then may they ſee the eaſtermoſt or greateſt caſtle upon the high hill, and alſo the litle Iland to the weſtwards of it.

How theſe landes doe lye one from the other, and from other lands.

FRom Arcaſon to Bayone ſouth 16 or 17 leag.
From Bayone to S. Iohn de Luz ſouth and by weſt 4 leagues.
From S. Iohn de Luz to the Pignons of S. Anna, ſouthweſt and by weſt 2 leagues.
From S. Iohn de Luz to S. Sebaſtians weſt 8 leag.
From S. Sebaſtians to Gateria weſt and by north, and weſt northweſt 8 leagues.
From Gateria to Cape Martinchaco northweſt 5 or 6 leagues.
From Bayone to the Seames n.w. 112 leagues.
From S. Sebaſtians to Bell-Ile n.n.w. ſomewhat northerly 80 leagues.
From S. Sebaſtians to the Seames northweſt and by north 112 leagues.

Heights.

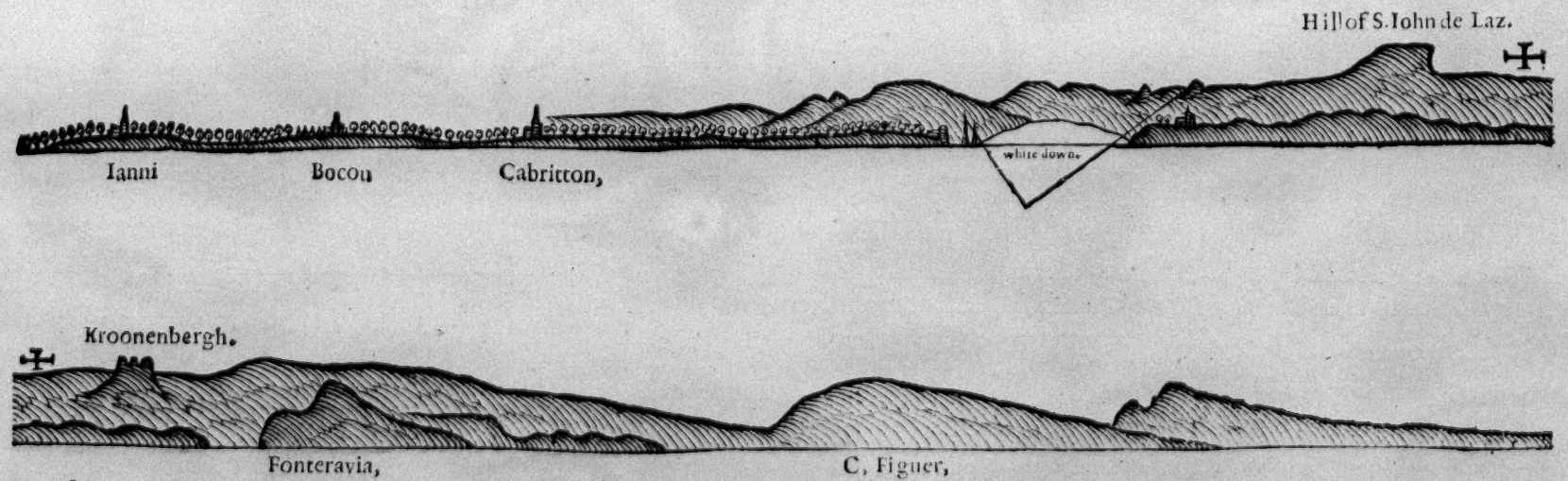
BAyone lyeth in 43 deg. 45 min.
The Cape de Martinchaco in 43 deg. 46 min

How

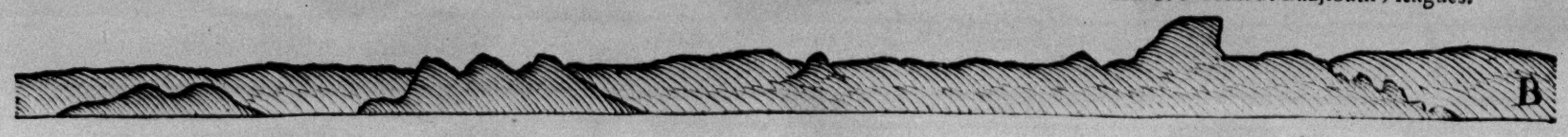
Hovv theſe lands do ſhevv themſelues at ſea.

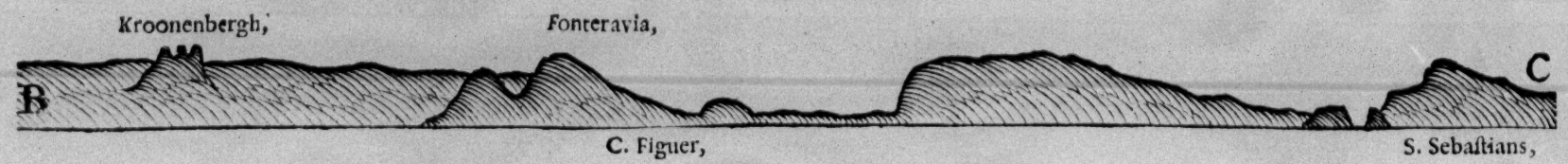
Thus ſheweth the land about the bight of S. Iohn de Luz, off from Cabritton untill paſt S. Sebaſtians.

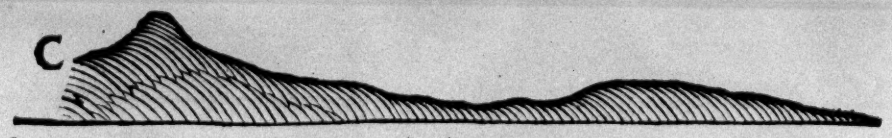
Thus ſheweth S. Sebaſtians, when you get firſt ſight of it, being ſeven leagues off from it.



The foreſayd land about the bight of S. Iohn de Luz from the northwards of Cabritton untill paſt Fonteravia, ſheweth thus, as is demonſtrated in theſe two figures, when you are before the barre of Bayone.



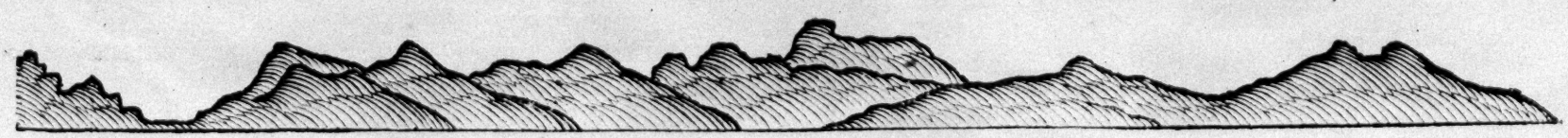




When the Hill of S. Iohn de Luz is south from you fiue leagues, then the land to the eastwards of it, vntill past S. Sebastians, sheweth as is here aboue portrayed in these two figures, the B B *and* C C *belong one to the other.*

S. Sebastians.

Thus sheweth the land about S. Sebastians when it is fiue leagues from you.



Thus sheweth the C. Martinchaco and the land to the eastwards of it

The

Bilbao

B I S

Castro

Laredo

Portogalete

Barsé

M. Madlin

Placen tia

Orinnan

Bari mes

C. Machicaco

De Kuſt van Biſcaijen
tuſſchen de C. de Maßichaco
en C. de Pinas.

B I S

Rio de Sella

Liuias

C A I A

C. Kesigo

S. Andero

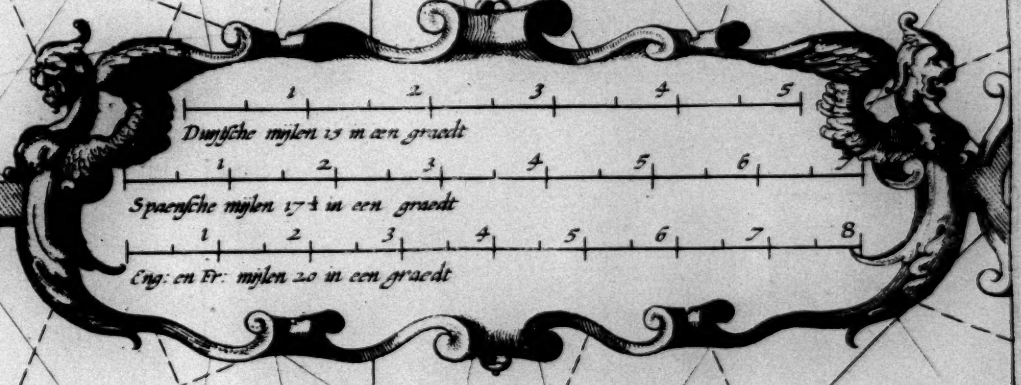
Laredo

Espinosa

S. Tirbe

S. Martin Setuvilles

S. Alana

S. Vincente

C A I A

Villa Viciosa

Sanjoen

Gijon

Jovas

C. de Pinas

92

CHAP. VII.

The coaſtes of Biſkaye, betvvixt C. de Martinchaco and the Cape de Pinas.

ABOUT thirteene leagues weſtnorthweſt from S. Sebaſtians, lyeth the Cape de Martinchaco, a little to the weſtwardes of it is a good tyde-haven, wherein lyeth a litle towne about a league within the land, upon a river which commeth out of the high land. A litle to the weſtwards of Cape de Martinchaco, lyeth a great rock faſt to the land, and a litle to the weſtwardes of the ſame, another: upon the poynt called *Punte de Avillanes*. Southweſt and by weſt from Martinchaco lyeth the haven of Barmea, a faire great Bay, the eaſter poynt is foule, therfore men muſt giue it a good birth, and run in alongſt by the weſt ſide, when they are gotten in it is large enough, there they may anckor where they will.

Barmea.

To the weſtwardes of Barmea, lyeth alſo Placentia upon a litle River, the towne lyeth a litle within the land. Theſe are all tyde havens.

Placentia.

From Cape de Martinchaco to Bilbao, (where betwixt lye the foreſayd havens of Barmea and Placentia) it is ſouthſouthweſt & ſouthweſt and by ſouth ſeven leagues.

Bilbao,

From Placentia to Bilbao it is two leagues weſtſouthweſt and weſt and by ſouth. Bilbao lyeth upon a great river, alongſt which there commeth off much Iron, it is a good haven, but it lyeth not farre in, by reaſon of the Barre which lyeth thwart over the haven, where men muſt goe in with high water.

At the eaſt point of Bilbao ſhooteth off a riffe, which men muſt avoyd, there lye alſo ſome rockes under water. It is a high ſteepe poynt, and is white to ſee to.

Within the riffe that runneth off from the poynt, men may anckor in ſeven and eight fathom, betwixt the poynt and the Piere on the eaſt ſide, there the Pilotes come off which bring up the ſhippes; and there men lye landlockt for a northweſt winde. From this foreſayd poynt or road to the Bar or rivers mouth of Bilbao it is a league and halfe ſouth and by weſt, which lyeth in by the weſtland, there ſtand fiue or ſixe houſes upon the weſtland, when the two weſtermoſt houſes come one in the other, or when you may ſee through the two eaſtermoſt houſes, which ſtand within in the land, then are you upon the Bar or ſhowld, then goe in ſouth, and ſouth and by eaſt right with the Caſtle Portugaletto, & alongſt cloſe by the Caſtle, and ankor a little within the Caſtle for a weſt wind. But when you are before the Barre, the Pilotes come off and bring you to the towne.

When you lye without in the Bay, then you may ſee Mount Anthony lye weſt & by north from you.

From the poynt of Bilbao to Caſtro, the courſe is weſt fiue leagues, that is a good haven of ſixe, ſeven, and eight fathom depth. The narrow of the haven lyeth in ſouth in ten fathom. But further in the river towardes the towne, it is not deeper then three or foure fathom.

Caſtro.

From Bilbao to the hill of S. Anthonies, it is weſt and by north nine or ten leagues. From Caſtro to Laredo, the courſe is weſt diſtant fiue leagues, upon the weſt ſide lyeth the foreſayd hill of S. Anthonies, which is a high hill, men may ſaile in cloſe alongſt by it, until they come about the eaſt poynt; within, it is wide and broad, and a fit haven for great ſhippes, there men may anckor in ſeven or eight fathom. To the eaſtwards over againſt the hill of S. Anthonies, in the middeſt of the ſound, lyeth a rane of rockes under water, where men may ſaile in about it on both ſides, men may eaſily eſpy them, becauſe it doth alwayes break upon them, within them is the road for ordinary ſhips, a litle before the haven, which is built with a wall; but the great ſhippes lye a litle further off in 6 or 7 fathom depth. On the ſouth ſide of the haven is a litle tyde-haven, from the ſame there commeth a great riffe ſhooting off from the eaſt ſide, towardes the hill of S. Anthonies; within it is two fathom water right before the village, from the village cometh a taile of ſand, lying thwart out, within it at low water it is a fathom deepe. In the middeſt of the ſound it is nine fathom, and at the poynt of S. Anthonies 20 fathom deep.

M. S. Anthony.

Suncken Rockes.

From S. Anthonies hill to Cape de Keſgo it is weſt and weſt and by ſouth two leagues, that is a great Cape lying to the eaſtwardes of S. Andero: thwart of it is clean ground.

C. Keſgo.

From Cape de Keſgo to the weſt poynt of S. Andero, it is weſt and by ſouth fiue leagues, a litle to the ſouthwardes of the poynt of S. Andero, upon the eaſt poynt of Sardinis, is a ſand-bay, there is good ankoring in ten fathom.

S. Andero.

From C. de Keſgo to the haven of S. Andero, the courſe is w.ſ.w. diſtant 2 great leagues. S. Andero lyeth within a Bay, there lyeth an Iland before the haven, men may goe about it on both ſides, it is deep 8 and 9 fathom; but to the ſouthwards of the Iland it is deep 5, 6, & 7 fathom, according as men will come neer to

the

the ſtrand, the haven lyeth in firſt w. n.w. The Iland lyeth a great league within the bay: from the eaſt poynt of the haven, unto the weſt poynt of the land, it is ſouth and north about a great league. S. Anthonies and the weſt poynt of S. Andero, lye one from the other eaſt and weſt about 5 leagues.

Laredo. For to know the land when you fall with the land about Laredo, you muſt know that on the weſt ſide of the haven of Laredo, lyeth the hill of S. Anthonies, which is a very high hill, which men may ſee very farre from the eaſt and the weſt, and a litle aboue the towne of Laredo, men may ſee alſo a ſharpe hill like the poynt of a Diamant, or the poynt of a two hand ſword, further it is about Laredo very high double land, two, three, and at ſome places foure double. The hill of S. Anthonies doth ariſe in two high hommocks, with a valley or ſadle in the middeſt betwixt them both; within in the land lye alſo two high hills with ſharpe topps. Aboue and to the weſtwards of S. Anthonies, lyeth a peece of land about two leagues long by judgment, which lyeth in fiue hills, the eaſtermoſt is the loweſt, and riſe all higher and higher towards the weſt, ſo that at the laſt the weſtermoſt is the higheſt, which goeth off ſomewhat flat downward towardes the weſt. Betwixt that eaſtermoſt hill and S. Anthonies, lyeth a bay about a league long, called the Bay of Port, men cannot ſee theſe foreſaid hills when they are cloſe by the land, but they muſt be a good wayes off to ſeawards. To the weſtwardes of theſe foreſayd hills lyeth another peece of land, which at the eaſt end is higheſt, and goeth ſloping off towardes the weſt end, almoſt like Portland. Betwixt that poynt and the fiue foreſayd hills, lyeth an other ſand-bay, whereabouts ſtand ſome litle houſes, but by it lye many rockes and fowle ground. Thereabouts within the land lyeth the foreſayd high round ſharpe hill in forme like the poynt of a ſword.

Bay of Port.

S. Andero hath but few hills that are good to bee known; but when men are before the haven, then they ſhall ſee to the eaſtwardes of the towne, a Caſtle upon a high hill, in forme like a Sugerloafe, or a hay-cock, and to the eaſtwards of it is much double land of two and three heights double. But when men come about the Cape de Keſgo, then they ſhall ſee preſently the caſtle upon the weſt land.

From S. Andero to C. de Pinas, the courſe is weſt or a litle more nor: herly 38 or 39 leagues. Betwixt them both ly theſe havens following.

S. Martin, Setteville. Firſt the haven of S. Martin, or Setteville, a tyde-haven lying eaſt and weſt foure leagues from S. Andero.

S. Vincent. From thence to S. Vincent alſo a tyde-haven is fiue leagues diſtant: the haven goeth in on the eaſt ſide; from the weſt ſide commeth ſhooting off a litle riffe, and in the midſt of the havens mouth lyeth a litle Iland, where men may goe in on both ſides.

Lhanes. From S. Vincent to Lhanes, a tyde-haven, the courſe is weſt 2 or 3 leagues. Upon the weſt ſide of the haven ſtandeth a litle church: and a litle within the haven, lyeth a middle plate or ſand, men muſt go in on the weſt ſide of the ſand: theſe are all narrow havens, and but litle knowne.

Rio de Sella. From Lhanes to Rio de Sella, the courſe is weſt 5 or 6 leagues: betwixt them both lye alongſt the coaſt many rocks, and within them many ſand-bayes, where men for need might ſaue ſhips.

He that wil goe into Rio de Sella muſt look out for a maſt which ſtands upon the eaſt land, cloſe by the ſame men muſt go in, the weſt ſide is within, fowle, within the maſt men muſt ankor before the village: this is alſo a tyde-haven.

From Rio de Sella to Villa Vicioaſa it is weſt 9 leagues: this is alſo a tydehaven, but is clean; the havens mouth lyeth in ſ.ſ.e. and ſoutheaſt and by ſouth cloſe alongſt by the weſt point of the land, the eaſt ſide is fowle unto the middeſt of the haven: there lyeth a rock with a plate right in the midſt of the haven, which at low water fall dry: ſo ſoon as men are within that rock, they muſt ankor within the rock; upon the weſt ſide lyeth the towne, men may alſo ſaile up to it, & ankor there in the ſhowld water.

Sanſon. Seven leagues to the weſtwards of Villa Vicioſa lyeth the out-poynt of Sanſon: to the eaſtwards of it lyeth a litle Iland, whereupon ſtandeth a litle tower. Betwixt Sanſon and the foreſayd litle Iland is a good road in 6 or 7 fathom.

At the weſt ſide of Sanſon is alſo a good road right before the litle haven of Sanſon in 6 or 7 fathom.

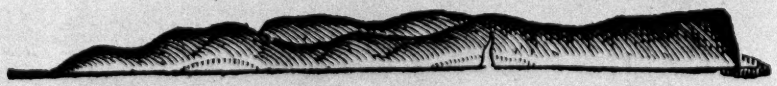
Gion. To the weſtwardes of Sanſon lyeth Gion with a Piere or Head that is paled off, under the which the Fiſhermen which dwell there, lay their barkes.

Tores. A great league to the weſtwards of Gion lyeth the Bay of Tores, a good road for a ſouth-weſt and weſt wind in 8 and 9 fathom. Vpon the poynt ſtandeth a high tower.

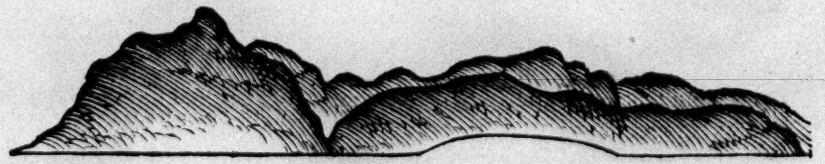
C. de Pinas. Three leagues to the weſtwardes of Tores lyeth Cape de Pinas, where many rockes lye off to ſeawards, at leaſt a halfe league off, ſome doe ſay that men may ſayle through betwixt the poynt and theſe rockes.

How

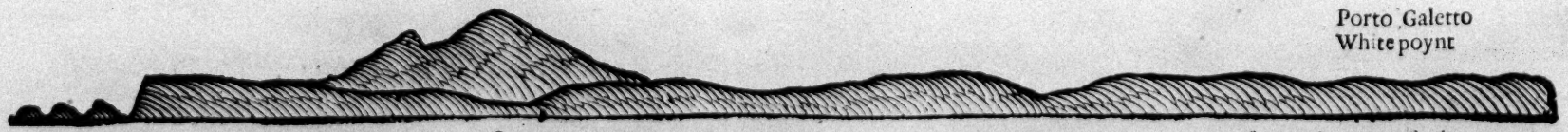
How these lands do shew themselues at sea.



Thus sheweth the land to the eastwards of Bilbao, when men fall there with the land.



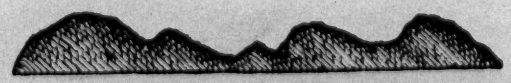
To the westwards of Bilbao towards Castro, men shall see a high sharpe hill, and sheweth thus towards Castro.



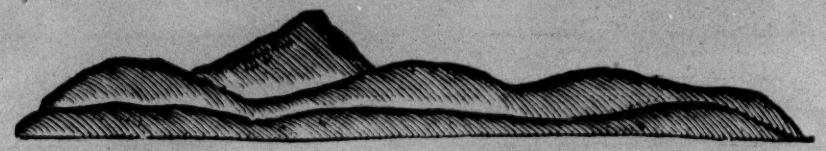
Thus sheweth the land betwixt the Cape Martinchaco and Bilbao.

Thus sheweth Bilbao and the land to the westwards of it, when you are thwart of it.

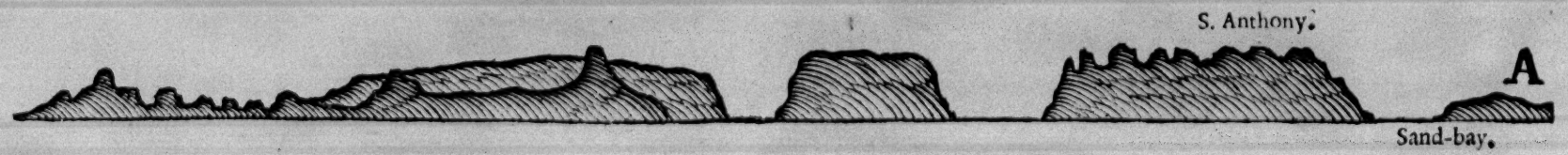
Thus sheweth the hill of S. Antonio lying at the west side of Laredo.

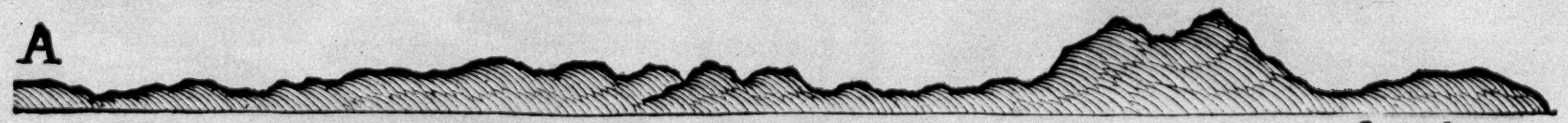


The hill of S. Antonio sheweth thus, when it lyeth s. s. e. from you.

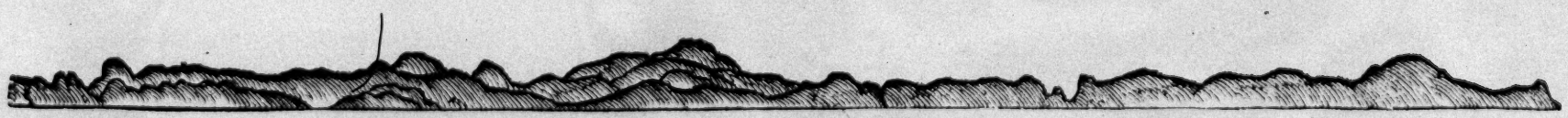


The land to the eastwards of Laredo, being south from you, sheweth thus with a sharpe hill.

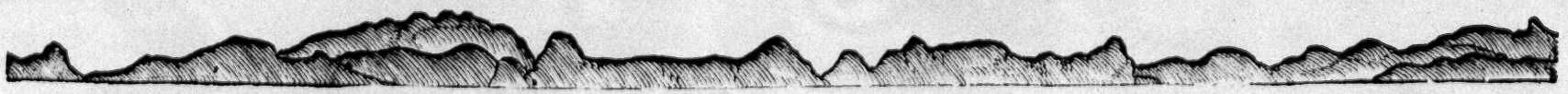




The land betwixt the west poynt of Bilbao, and C. de Kesgo to the westwards of Mount S. Antonio, sheweth at sea when you saile alongst by it, as it portrayed in these two figures here aboue.



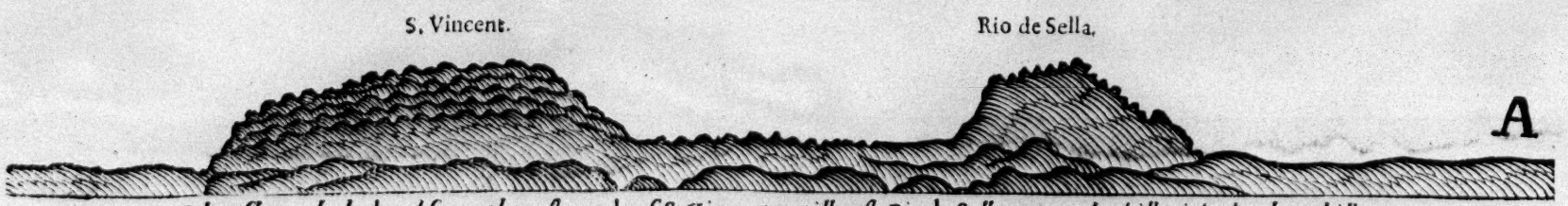
Thus sheweth the land of Biskaye betwixt Laredo and Rio de Sella, when you saile alongst by it.



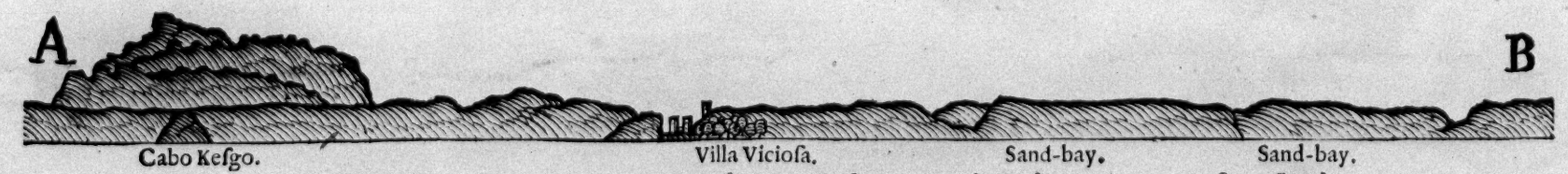
Thus sheweth the land from Rio de Sella off, to Cabo de Pinas, when you saile alongst by it.

These

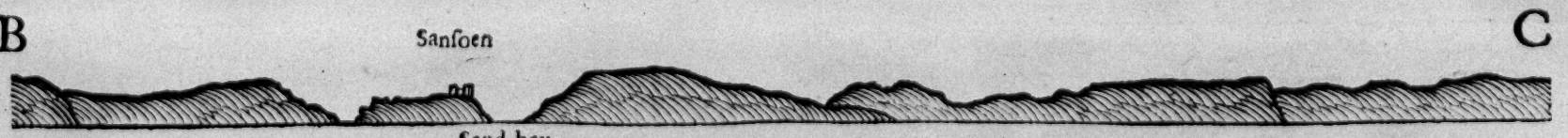
These foure figures following belong one to the other, the like letters as A A, B B, C C, *one to the other, and is the coast from the eastwardes of S. Vincent to Cape de Pinas.*



Thus sheweth the land from the eastwards of S. Vincent untill past Rio de Sella, when the hill with the three hilles is foure leagues thwart from you, and Rio de Sella is foure leagues southwest from you.



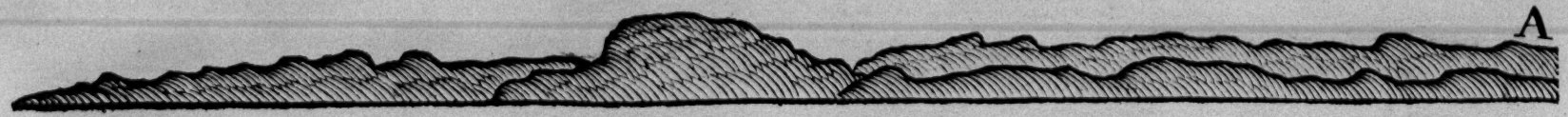
Thus sheweth C. Kesgo, Villa Viciosa, and the land to the westwards of them, when C. Kesgo is south foure leagues, and Villa Viciosa foure or fiue leagues southsouthwest from you.



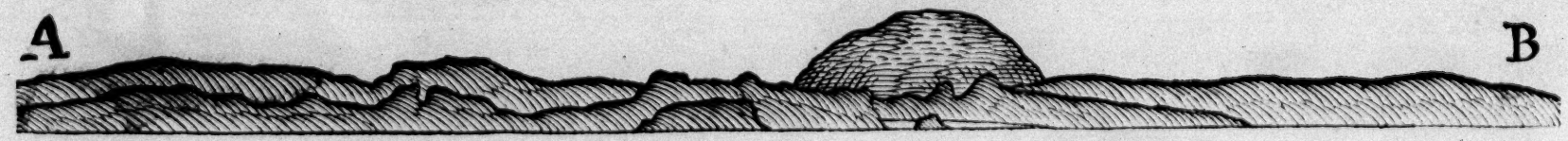
Thus sheweth the land of Biskaye, when you are thwart of Gion

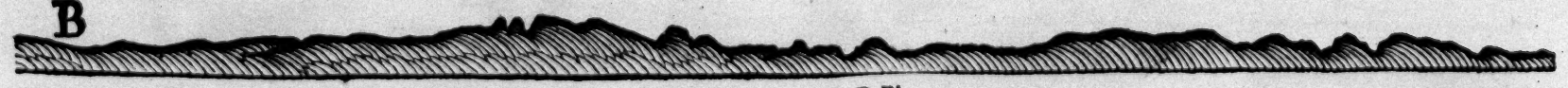
These three figures following belong one to the other, the like letters one to the other, and shew the rising of the land on both sides of the Cape de Pinas, to wit, when the Cape Pinas is about foure leagues south somewhat westerly, and the great hill to the eastwardes of it is southeast from you.

Southeast



This hill lyeth most commonly covered with snow.





C. Pinas.

of

Zeecuſten van
Galiſſen
tuſſchen C. de Pinas en
C. de Ortegal.

G A

't Landt van Artedo

Castrapol

Ribadeus

Luarca

Avilés

C. de Avilés

C. de Pinas

44

Duytſche mijlen 15 in een Graadt

Spaanſche mijlen 17½ in een Graadt

Eng. en Franſ. mijlen 20. in een Graadt

L I S S E N

Vloetta Segnora alias las Velos

C. de Brito

Bay S. Cyprian

Viverus

S. Marcus

I. S. Cyprian

Karyna

Caſtel van Ortegal

C. de Ortegal

93

Of the tydes, and courſe of the ſtreames.

ON all the places, and before all the havens of theſe coaſts, a ſouthweſt and northeaſt moon maketh the higheſt water; but within the havens about a poynt later, according as they lye deepe within the land, like as on the coaſts of Brittaigne, Poictou, and Gaſcoigny. Men reckon here alſo no falling or ſetting of the ſtreames. But the ſtreames fall here thwart off and on.

How theſe lands lye one from the other, and from other lands.

THe courſes and diſtances of theſe places one from the other, is declared in the deſcription.

From Cape Martinchaco to Arcaſon northeaſt eaſterly 28 leagues.

From C. Martinchaco to Vſe, north eaſterly 60 leagues.

From S. Andero to the Seames northnorthweſt 96 leagues.

From Cape de Pinas to the Tower of Cordan eaſtnortheaſt, and northeaſt and by eaſt 72 leagues.

From Cape de Pinas to Porthus or S. Martins Iland, the courſe is northeaſt eaſterly 80 leagues.

From Cape de Pinas to Bell-Ile the courſe is northnortheaſt 80 leagues

From Cape de Pinas to the Seames north 88 leagues.

From Cape de Pinas to Cabo de Veilli in Ireland north & by weſt weſterly 170 leagues.

Heights.

THe Cape Martinchaco lyeth in 43 degrees 46 or 48 minutes.

The Cape de Pinas lyeth in 43 degrees 54 or 56 minutes.

The whole coaſt of Biskaye betwixt Cape de Pinas and Martinchaco, lyeth in about 43 degrees and 43,44 or 45 minutes.

CHAP. VIII.

The coaſtes of Galicia betvvixt the Cape de Pinas and the Cape de Ortegall.

FROM the Cape de Pinas lyeth off a rane of rockes, lying off at the leaſt a halfe league into ſea, ſome ſay that men may ſaile through betwixt the point and theſe rockes, But a litle within or to the weſtwards of the Cape de Pinas, lyeth a great rock, betwixt that rocke and the land men may ſaile through.

When men are within the Cape de Pinas, then lyeth Avilles three leagues from thence ſouthſouthweſt, which is a good tyde-haven, where a great ſhippe may well goe in at halfe flood, alſo there is a good road before this haven in ſixe and ſeven fathom.

Avilles. For to ſaile in there, men muſt goe in by the eaſtland, the weſtland is farre off ſhowld, there ſtandeth a litle chappell upon the eaſt land, men muſt ſaile in cloſe by it, and anckor a litle wayes within two rockes that lye on the eaſt ſide, a litle within the havens mouth. The towne lyeth a league further up. From the weſt poynt runneth off a riffe, and lyeth inwards alongſt the haven, towardes the town, ſo that it is there very ſhowld on both ſides. On the weſt ſide without the haven in the bight, lye two great rockes right before the litle Church in the Sand-bay, men may ſaile round about them, but it is not very cleane: but without the rocks is good anckor-ground in ſeven or eight fathom, over againſt the litle Church that ſtandeth againſt the high land.

From Avilles to Luarca it is ſixe leagues, and from Luarca to Ribadeus weſtſouthweſt ſixe leagues, and from Avilles to Ribadeus ſouthweſt and by weſt twelue leagues. Luarca.

From the eaſt poynt of the havens mouth of Ribadeus, lyeth off a ledge or riffe of rocks towardes the weſt ſhore, you may ſound in about it in foure fathom, or foure fathom and a halfe: or elſe if you keepe the litle towne Caſtropoll even without the poynt, and ſo ſaile right in with it, then you ſhall not come too neere the foreſayd ledge, but you ſhall ſaile far enough alongſt to the weſtwardes of it. The weſt poynt ſheweth it ſelfe when you come in out of the ſea, like an Iland; upon it at the north end ſtandeth a flat tower, almoſt like the tower in the Groyne, but not ſo great. About thwart of that tower lyeth a ſuncken rocke a Ribadeus.

litle wayes from the land, you muſt look out for it, and take heed of it, when there commeth in any great ſea, you can eaſily eſpye it by the breaking of the ſea upon it, but not with ſmooth water: at the very loweſt water it commeth even with the water. The weſt ſhore is fowle and rocky, there runneth off to the ſouthwardes of the foreſayd tower alſo a fowle ledge or riffe of rockes, at leaſt halfe wayes over the havens mouth, and at the ſide of it you cannot uſe the lead. When you are paſt the ledge or riffe that lyeth off from the eaſt ſhore, you muſt run in about it, and edge in ſomewhat to the eaſt ſhore, and ſaile in alongſt by it, until that you are paſt, or come to the end of the foreſayd ledge or riffe of rockes, which lyeth off from the weſt ſhore, as ſoone as you ſhall be paſt it, you muſt luffe up about it towards the weſt ſhore, for to giue the eaſt ſhore (within the havens mouth) a birth, which is a great wayes within very flat or ſhowld, but on the weſt ſide it is deep water. There ſtandeth a litle tower on the weſt ſhore a litle within the poynt, where the riffe lyeth off, which you ſhall ſee when you are come within the weſt poynt, and run alongſt by the riffe, when you get that little tower weſt or thwart of you, then are you at the end of the riffe, then you muſt ſaile towardes that litle tower, untill that you come to the weſt ſhore, and run in alongſt by it, untill you come before the towne, there you muſt lye with an anckor to ſeawards, and with a cable faſt on the rockes.

A litle league to the weſtwardes of Ribadeus lyeth a tyde-haven, he that cometh from the weſt alongſt by the ſhore, thwart of it, ſhould lightly thinke that to bee the haven of Ribadeus, but it is light to diſcerne from it by theſe markes following. On both ſides of this tyde-haven are the coaſts all high land, but on both ſides of the havens mouth of Ribadeus, it is low land. Alſo there lyeth a high ſharpe hill, and very good to be knowne, which ariſeth out aboue all other hills thereabouts, which may bee knowne at leaſt 7 or 8 leagues off, upon it lye ſome heapes of ſtones to ſee to like litle houſes, when that you haue that hill ſ. ſ w. from you, and ſaile in ſo right with it, then you ſhall fall with the land right before the havens mouth of Ribadeus.

Northweſt from Ribadeus about 8 leagues, lyeth the Cabo de Brilo, a litle to the weſtwards of it lyeth the litle towne Viverus. To the weſtwardes of the Bay of Cipriaen (where men may anckor in ten fathom) lye two great high rockes: w.n.w. from theſe rockes about a halfe league lyeth the Iland S. Ciprian, right before the haven of Viverus, whereby this haven is good to be known: you may ſaile about on both ſides of this Iland into the haven of Viverus, in all alongſt in the middle of the channell ſouth and ſouth and by weſt until you come before the town, being within, you may ankor where you will either on the eaſt or weſt ſide, it is there ſhowld water of 5, 6, 7, and 8 fathom, according as you run farre in. From the haven of Viverus, or from the Iland S. Ciprian to C. de Ortegall, the courſe is w.n w. nine leagues. Viverus.

Betwixt both, a league to the weſtwards of Viverus, lyeth the little towne of S. Marcus with a Bay, there men may anckor in 7 or 8 fathom, and ride for a ſ. ſ. w. and weſt wind.

Two great leagues to the weſtwards of S. Marcus lyeth the river of Caryns, there is alſo good anckoring, and from thence forth unto the Caſtle of Ortegall, all the coaſt alongſt, it is there every where cleane. From Caryns to Ortegall the courſe is northweſt fiue leagues.

Ortegall is a great poynt lying out, to the eaſtwardes of it men may lye landlockt for a northweſt, weſt, ſouthweſt, and ſouth winde, thwart of the caſtle is the beſt road, there men may anckor in 8 or 9 fathom. When men come from the eaſt, Ortegall is good to bee knowne, they ſhall ſee the caſtle ſtand againſt the high land.

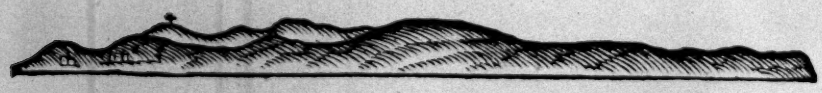
Of the tydes.

ON theſe coaſts, as on the former, a ſouthweſt and northeaſt moone maketh high water.

Courſes and Diſtances.

FRom C. de Pinas to Avilles ſ. ſ. w.	3 leag.
From Luarca to Ribadeus w. ſ. w.	6 leag.
From Ribadeus to C. de Brilo n.w.	8 leag.
From C. de Pinas to Ribadeus ſouthweſt and by weſt	13 or 14 leag.
From Cape de Pinas to Ortegall weſt and by northweſterly.	29 leagues.

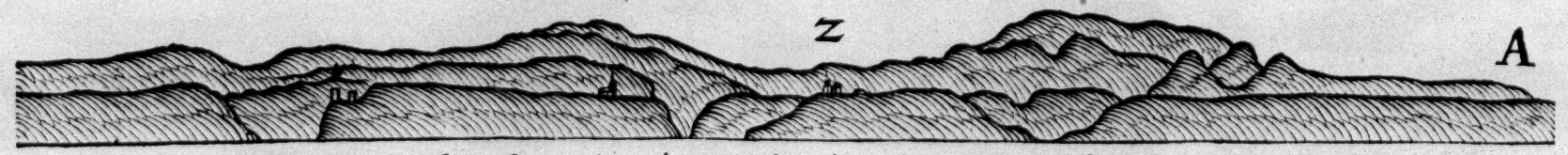
Hovv theſe lands do ſhevv themſelues at ſea.



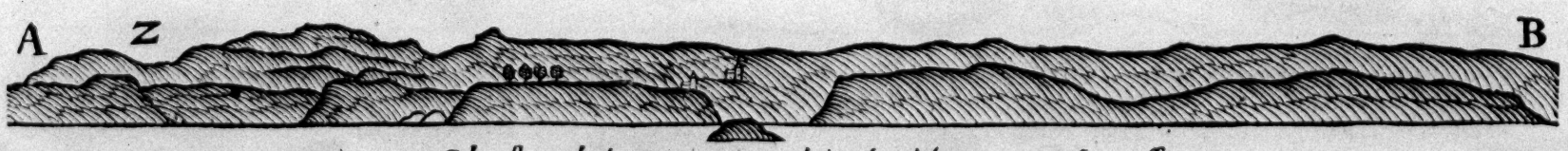
Thus ſheweth the land of Avilles when you are thwart of it.

Theſe

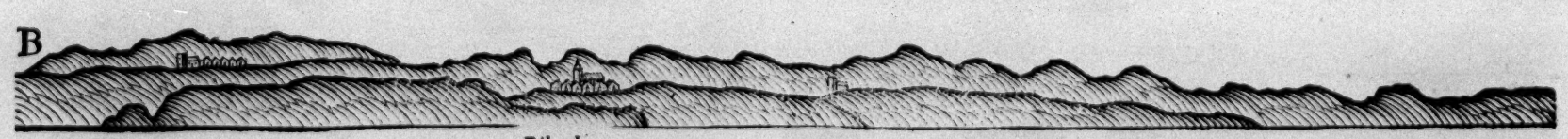
These three figures following belong one to the other, at the like letters one to the other, and shew the rising of the land betwixt C. de Pinas and Ribadeus, when you saile alongst close by the land.



Thus is the eastermost towardes C. de Pinas when the land against Z is south from you.



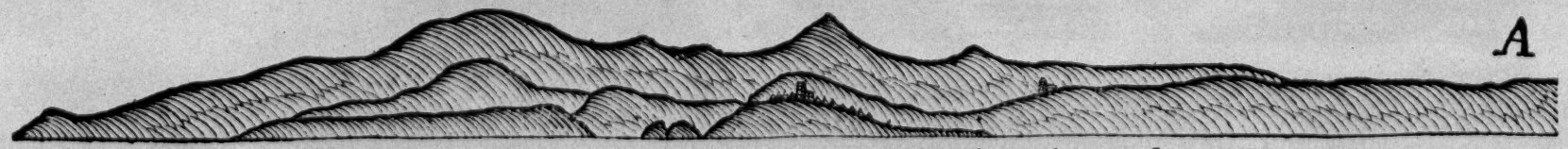
Thus sheweth that land against Z being south from you not farre off.



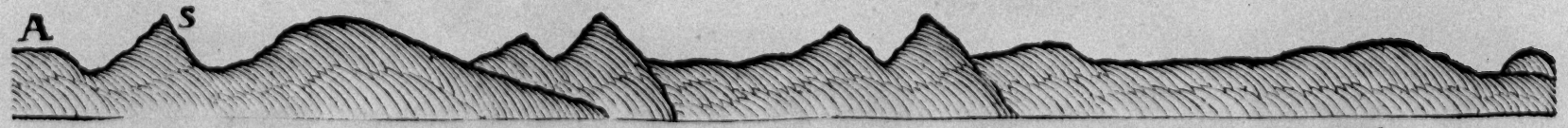
Ribadeus

Thus sheweth the land betwixt Luarca and Ribadeus.

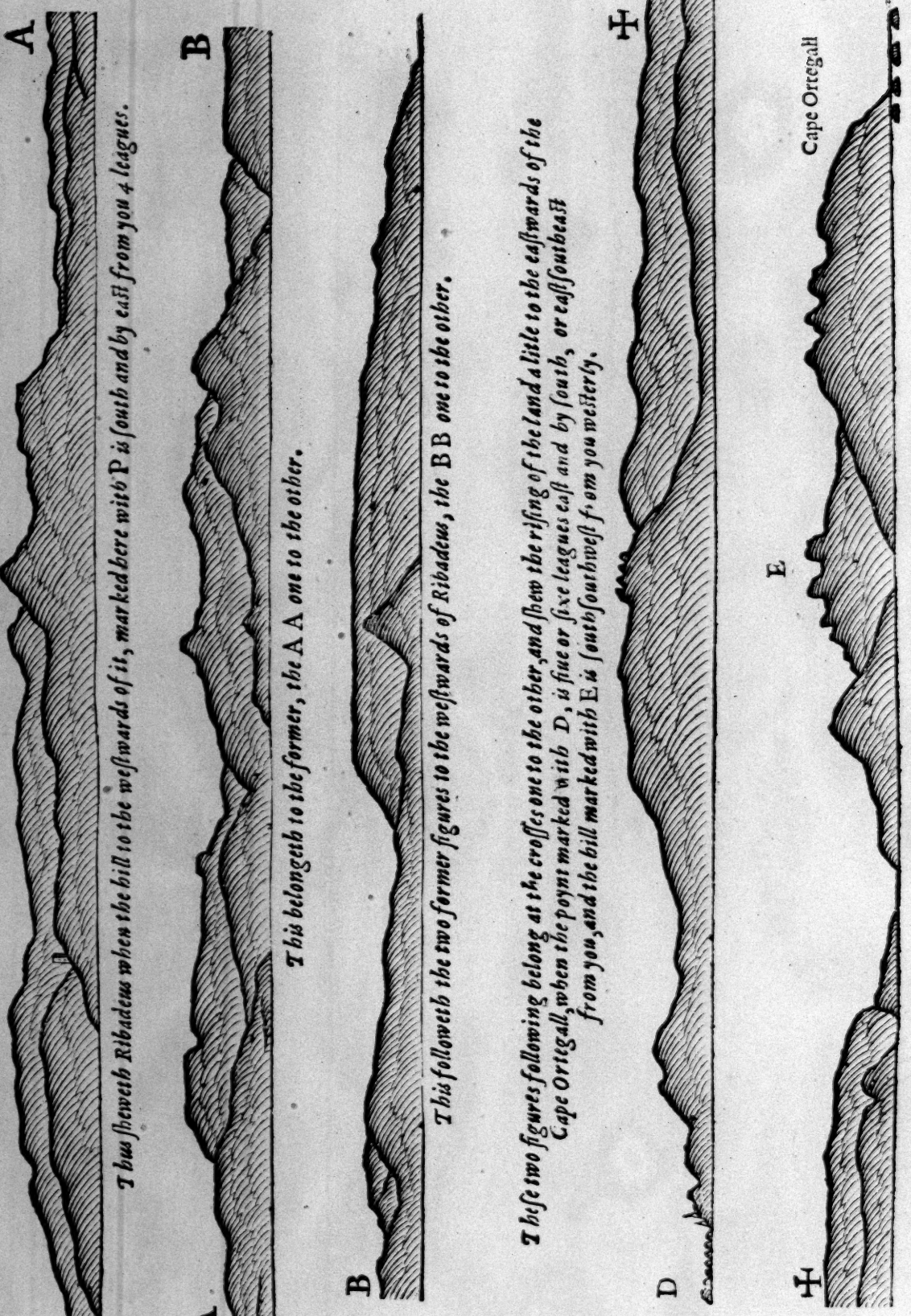
These two figures following belong one to the other at the A A *together.*



Thus sheweth Ribadeus when you are thwart of it about a halfe league from the shore.



Thus sheweth the land to the westwards of Ribadeus when the hill by S. is south from you, and followeth to the former figure.



To the Booke-binder.

Place the Cards thus.

Numb.	before		fol.	Numb.	before		fol.
85 and 86	—	—	103	90	—	—	121
87	—	—	109	91	—	—	123
88	—	—	113	92	—	—	127
89	—	—	115	93	—	—	133

The third parts

FIFTH BOOKE

of the

SEA-MIRROVR

of the Weſterne and Southerne

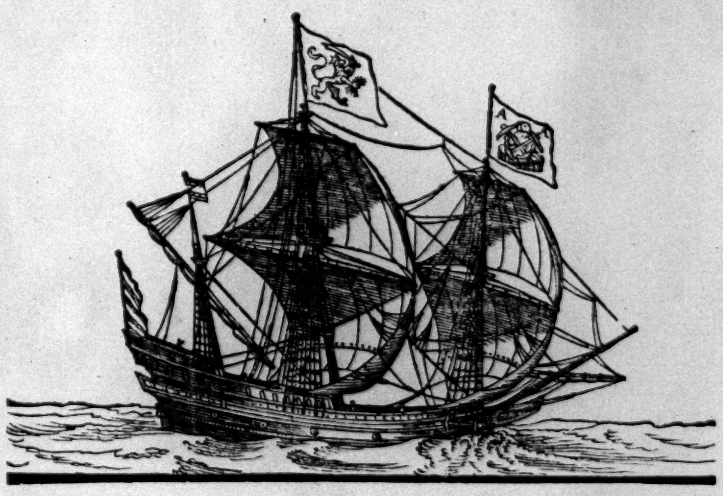
NAVIGATION.

Containing

THE DESCRIPTION OF THE

Coaſts of Gallicia, Portingall and Spaine.

From the Cape of Ortegall vnto the
Straight of Gibraltar.



With priviledge of the H. M. Lords the States Generall
of the Vnited Provinces for ten yeares. 1625.

Met Privilegie der Ed. H. M. Heeren Staten generael voor thien jaren.

De Cuſten van Galliſſen Portugal en Andaluſien van de C. Ortegal tot de Strate van Gibraltar.

Duijtſche mijlē 15 in een graadt

Spaenſche mijl: 17½ in een graa.

Eng: en Fr. mijl: 20 in een graadt

C. de Pinas

Ribadeu

C. de Ortegal

Corunna

C. de Finisterre

Bayona

Camina

Vivero

Port a Port

Barlingas

Larache
Arzila
Tetuan
Alcaçar
Tanger
C. de Spartel
Ceuta
C. de Ceres
Gibraltar
Cabo de Trafalgar
Puerto Real
P. de S. Sebastian
P. de S. Maria
Cadiz
Rota
Sanlucar
Ayamonte
Tavila
Castro Marin
S. Miguel
Lepe
Huelva
Saltes
Villa Nova
Lagos
Sagres
Cabo de S. Vincente
Setubal
St. Ubes
Cabo de Espichel
Lisboa
S. Ierobi
Cabo de Roca
35
36
37
38
39
94

C. Ortegal

Duytſche mijlen 15 in een Graadt

Spaanſche mijlen 17½ in een Graadt

Eng. en Franſ. mijlen 20 in een Graadt

Sisargus

Ferol

C. de Prior

Pointe de Mas

Fontein

Corunna

De Zeecuſten van Galiſſen tuſſchen de Cabē Ortegal en Finiſterre.

C. Finiſterre

Monſſy

Marie kerck.

C. Corianne

Monge

Queres

Munnick

C. de Belem

95

C.Ort

Siveru

C Pri

Ferol

THE FIFTH BOOKE of the VVESTERNE NAVIGATION,

Containing the Deſcription of the Coaſtes of Galicia, Portingall, and Spain, from the cape Ortegall to the Strait of Gibraltar.

CHAP. I.

From the Cape Ortegall to the C. Finiſterre.

C. Ortegal

ABOVT a league north-northweſt into ſea from the C. de Ortegall, lyeth a great rane of rocks: betwixt them and the foreſayd Cape, men may ſaile through in ten fathom.

From the Cape Ortegall to the C. Prior, the courſe is ſouthweſt ten leagues: betwixt them both lyeth a Towne called Sedeira, by the Siverus. Dutch Skippers called Siverus, which hath a deepe haven lying in ſoutheaſt The north ſide of the haven is rocky and fowle, which you muſt avoyd, and run cloſe in by the weſtland, which is a high land; alongſt by it, it is twelue fathom deepe, within the havens mouth it is ten fathom deepe, you may ſaile in untill you come before the towne, and anckor there in 6 or 7 fathom.

C Prior. Fiue leagues to the weſtwardes of Sedeira lyeth the C. de Prior, which is a very ragged hil, to ſee to a far off, as if it were ful of people.

Feroll. Three leagues from the Cape de Prior, lyeth the haven of Feroll: betwixt them both lye two litle ſand-bayes, the ſouthermoſt (wherein ſtand ſome litle white houſes) is the greateſt, and lyeth a litle to the northwardes of the north poynt of Feroll; when you come neere the Baye, the haven beginneth to open it ſelfe, it lyeth eaſtnortheaſt and eaſt and by north in, amids the channell betwixt two high lands: when you come in, you muſt preſently edge up to the northwards by the north point and ankor there a litle to the weſtwardes of the village Feroll, before the village it is flat and rocky ground.

When you come from the weſt, or from the Groyne, and will ſaile into the haven of Feroll, then goe away from the litle Iland S. Blaſius north, and north and by weſt, and run a good wayes about, without the ſouth poynt of Feroll (which is very fowle and rocky) untill that you ſee the haven open; goe then yet ſo farre to the northwards of the ſouth poynt, untill that the haven doe ſhut againe, and run then right in with the foreſayd greateſt ſand-bay, wherein ſtand the two or three litle white houſes to the northwards of the haven, untill that you be within the ſouth poynt, and the fowle grounds which lye off from it; ſaile then right to the north poynt of the haven, and alongſt by it towards the ſouth ſide, untill that the haven doe open it ſelfe againe, and runne then (as before) alongſt in the middeſt of the chanell. This haven is ſo narrow in the comming in, that you may caſt a ſtone upon the land on both ſides, and in that narrow it is 20 fathom deepe. When you are in the havens mouth, you may ſee through betwixt the Iland Siſarga, and the maine land to the ſouthwards of it. For to ſaile into Feroll from the ſouthward

To ſaile from Feroll to the Groyne, the courſe is ſouth, and ſouth & by weſt 3 leagues, when you come neere the weſtland, you muſt giue it a birth, at leaſt of foure or fiue Cables lengths, becauſe it is not very cleane. When you come by the poynt where the Caſtle ſtandeth on, you ſhall ſee then alſo a litle Iland with a litle houſe upon it, you may ſaile alongſt by it within a halfe cables length, and runne about by it, up to the weſtwardes, untill you come before the Fiſher village, and anckor there in ſixe, ſeven, or eight fathom. For to ſaile into the Groyne.

From Cape de Prior to the Groyne, the courſe is ſouth, and ſouth and by weſt fiue leagues.

Haven of Bitanze. Eaſtnortheaſt from the foreſayd Iland where the Caſtle ſtandeth upon, goeth in a Sound ſoutheaſt fiue or ſixe leagues within the land,

to Bitanze, wherein you may anckor on the weſt ſide under a row of rocks, in 10 or 12 fathom, alſo you may ſaile ſo deepe in, that you can ſee no ſea.

Ponte de Mas. To the northwards of that Sound, over againſt the poynt of the Groyne, lyeth alſo an other haven or Sound called Ponte de Mas, on the north ſide lyeth a row of rockes, where men run alongſt to the ſouthwardes of them: men may alſo ſaile there ſo deepe in, that they can ſee no ſea. A good wayes within lyeth a great bridge over the river.

He that commeth from the weſt off from the Iland Ciſarga, & is bound into the Groyne, muſt giue the north poynt, or the weſt poynt of the Groyne (where the tower ſtandeth) a birth of 4 or fiue cables lengths, as before is ſayd, which poynt is rocky and fowle farre from the ſhore, and run then eaſtſoutheaſt, and ſoutheaſt about by the poynt, and afterwardes ſ.ſ.e. unto the litle Iland with the Caſtle, and about by it, as is before ſayd.

Iland Ciſarga. The litle Iland Ciſarga, of the Dutchmen called Ceſarie, is fowle round about, and lyeth from the poynt of the Groyne, due eaſt & weſt diſtant 7 or 8 leagues, from the haven of Ferol weſt and by ſouth, from the C. Prior w.ſ.w. and ſouthweſt and by weſt, and from the C. de Ortegall ſouthweſt, and ſouthweſt and by weſt 17 or 18 leagues.

Queres. From the Iland Ciſarga ſouth and by weſt, and ſ.ſ.w. lyeth Queres, a good haven alſo for great ſhips, the weſt ſhore is cleane, but the eaſt ſhore is fowle, therefore men muſt ſayle in alongſt by the weſt ſhore, when they are betwixt the two lands, then they muſt goe in amids the channell, unto the poynt, and then run up to the weſtwards a great halfe league in, and anckor there in 7, 8, and 9 fathom.

C. de Bylem. From the Iland Ciſarga ſouthweſt and by weſt, and w.ſ.w. 12 or 13 leagues, lyeth the eaſt poynt of Monſie, called Cabo de Bylem, which is a high ſteepe poynt, with many ragged rocks lying off looſe from the land, wherof the greateſt, being like a tower, doth ſhew it ſelfe black, and is called the Munk.

There lyeth alſo a great rane of rocks right before the haven or ſound of Monſie, ſouthweſt and by ſouth from the Munck, at leaſt two or three cables lengths long, but the innermoſt end of it lyeth from the Monck ſouth & by weſt. When men fall with the land of Monſie, it is all double land; about the C. de Finiſterre lyeth a high white ſand, lying in within the land like a ſand-bay.

Alſo men ſhall ſee coming about the C. de Finiſterre, a ragged hill which runneth alongſt ſo farre to the ſouthwards, that men may ſee it before the Moores.

Monſye. He that is bound in for Monſie, coming from Ciſarga, muſt goe in cloſe alongſt by the C. de Bilem, or Bellem: this point is altogether a ragged high ſharpe land of ſteepe rocks, as before is ſayd, and when you are by that poynt, then you muſt keepe the Cape de Coriane a ſhips length without the Cape de Kote, ſo long untill that the Church of S. Maria come without the poynt of Monſye; run then in at the eaſter channell ſouthſcutheaſt upon theſe marks, untill you be paſt the Church, then you ſhall ſee a row of rocks, run in behind or within them, and anckor there before the village of Monſye in fiue, ſixe, or ſeven fathom. When you ſaile thus from the C. de Bylem to Monſye, then the rocks (which lye in the middeſt before the haven) remain about an Engliſh mile to ſeawards on the weſt ſide of you.

The weſter channell of Monſye. For to ſaile in at the weſter channell, you muſt go in e.ſ.e. indifferent neere alongſt by the land, and when the foreſaid Ladies church commeth without the poynt, then you muſt ſaile towardes the rockes, which lye before Monſye, as is before ſayd, and anckor within the rockes in 7 or 8 fathom, but runne not too farre in, becauſe there ſhooteth off a ſhowld riffe alongſt the haven, whereof you muſt take heed.

The eaſter channell of Monſye. The eaſter channell is better to come into, then the weſter channell: ſaile not into Monſye before that you ſee the foreſayd Church, without the poynt, you may alſo anckor on the north ſide of the haven in fiue, ſixe, or ſeven fathom.

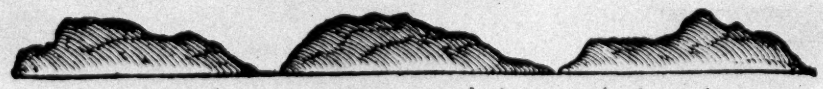
To the ſouthwards of the village of Monſy is a Bay where the foreſayd riffe or ſhowld lyeth before, lying e.n.e. at leaſt two cables lengths alongſt the haven.

Our Ladies Church and the Munck lye one from the other north and by eaſt, and ſouth and by weſt.

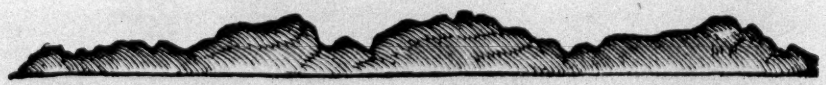
C. de Coriane. Southweſt from the Cape de Bellem three leagues lyeth the Cape de Coriane.

From Cape de Coriane it is ſouth and north three leagues to C. de Finiſterre: betwixt the two Capes is a ſand-bay, where men may ankor to the eaſtwards of a great rock in ſixe or ſeven fathom. This is a great Bay which goeth in farre into the land. At the north ſide of this bay lye rocks under water, whereof men muſt take heed.

Howv theſe lands do ſhevv themſelues at ſea.



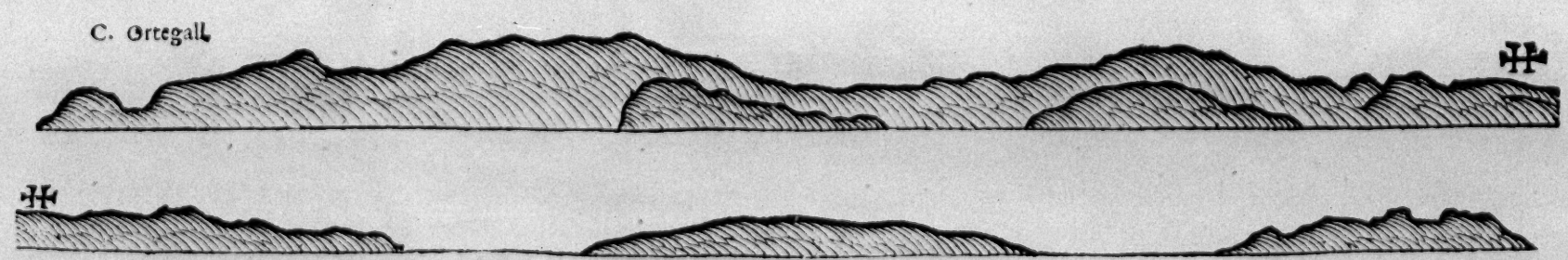
Thus ſhewʒth Ortegall when it lyeth ſ. e. and by ſouth from you.



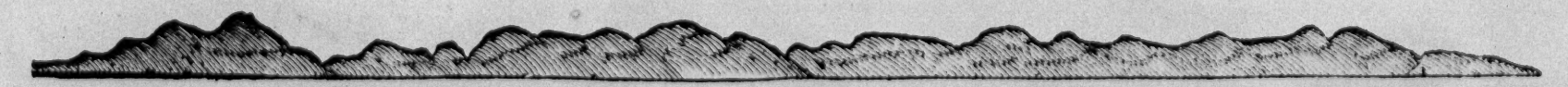
When Ortegall is ſoutheaſt from you, ie ſheweth it ſelfe thus.

Thus ariſeth Ortegall when the eaſtermoſt hill lyeth ſouthſoutheaſt from you, and that you may ſee the eaſt end with cleare ſight, being eight, nine, or ten leagues off at ſea.

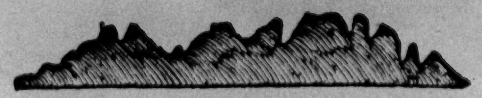
C. Ortegall.



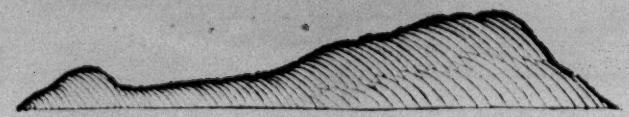
Theſe two figures belong at the double croſſes one to the other, and ſhew the Cape Ortegall with the land to the weſtwards of it, when the foreſaid Cape is eaſt and by ſouth fiue or ſixe leagues from you.



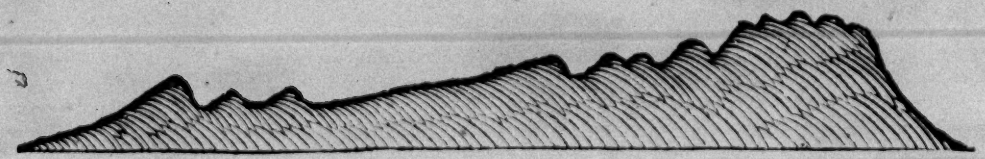
The land to the eaſtwards of the Groyne ſheweth thus, when it is ſouth and by eaſt from you.



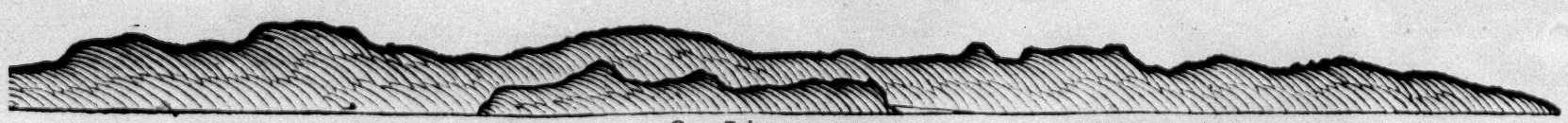
Cape Prior, the east poynt of the Groyne ariseth in this forme.



Cape Prior being southwest from you sixe or seven leagues, sheweth it selfe thus.



Cape Prior being southwest and by south from you 4 or 5 leagues, sheweth it selfe thus.



Cape Prior.

When the Cape de Prior is east and by north easterly three or foure leagues from you, it ariseth in this forme.

Thus sheweth the land of Monsie betwixt Cisarga and Cape de Finisterre when you come from the east and saile alongst by it.

Of

The Cape de Finisterre being southeast southerly from you, sheweth it selfe thus.

When Cape de Finisterre is southeast and by east from you, 5 or 6 leagues, then it sheweth it selfe thus.

When Cape de Finisterre is southsoutheast from you, then it sheweth thus.

Thus sheweth Cape de Finisterre when it is southeast easterly from you.

How the foresayd Cape ariseth being more easterly and northerly from you, you may see in the Chapter following.

Of the tydes.

A Southwest and northeast Moon maketh full sea at these foresayd places, on the sea coast, and within the havens a poynt later.

How these lands doe lye one from the other, and from other lands.

FRom Cape Ortegall to Siverus southwest
— — 5 leagues.
From Siverus to Cape de Prior southwest
— — 5 leagues.
From Cape de Prior to Feroll south & by east
— — 3 leagues.
From Feroll to the Groyne south, and south and by west 3 leagues.
From the Groyne to Cisarga west 8 leagues.
From Cisarga to Queres south and by west, and southsouthwest 2 leagues.
From Cisarga to Cape de Bylem, or the east poynt of Monsy, southwest and by west, and westsouthwest. 12 or 13 leagues.
From Cape de Bylem to Cape de Coriane, or Torrivian southwest 3 leagues.
From Cape de Coriane to Cape de Finisterre south 3 leagues.

From Cape de Ortegall to C. de Prior southwest 10 leagues.
From Cape de Ortegall to Cisarga southwest, and southwest and by west 19 leagues.
From Cape de Prior to Cisarga southwest and by west 9 leagues.
From Feroll to Cisarga west and by south
— — 8 leagues.
Prom Cape de Ortegall to Cape de Coriane southwest and by west 33 leagues.

From Cape de Ortegall to waterford in Ireland north 168 leagues.
From Cisarga to C. Veio north 160 leagues.
From Cisarga to Silly north and by east
— — — 137 leagues.

Heights of these landes.

CApe de Ortegall lyeth in 44 degr. 5 min.
Cape de Coriane in 43 degr. 8 min.

CHAP. II.

The coastes of Galicia from the Cape Finisterre to Camina.

ABOUT a league to the eastwards of Cape de Finisterre on the south side, lyeth the haven of Seche or Corcovia, and is called by the Dutch Shippe-masters Corck Bayone. Betwixt this haven and the Cape lye two sand-bayes, the first, or that which is next unto the Cape, is the greatest, and by the second goeth in this haven north, in eight and nine fathom. On the east side of the haven lyeth a great rocke, and about southsouthwest off from that rock, almost in the middest of the haven, lyeth a suncken rocke under water: but runne in north untill you espye the towne on the west side, and anckor there in sixe or seven fathom. Within upon the river lyeth also a Village, or little Towne, about northnortheast from you.

Seche.

Corck Bayone.

From Cape de Finisterre to the haven of Moors, the course is southeast 5 great leagues, when you come about the Cape de Finisterre, you shall see a high ragged hill which runneth so farre to the southwards, that you may see it also before Moores, that is a good mark for to know the land by thereabouts.

Moores.

When the foresaid ragged hill is northeast from you, then are you thwart of C. de Finisterre, and then the hill Monte Lauro, which lyeth upon the northeast poynt of Moores, lyeth e. n. e. from you, that is a high cloven hill which is also good to know.

Southeast three litle leagues from the Cape de Finisterre, lyeth a rane of rockes under water, and eastsoutheast about two leagues from these rockes, lye also some rockes aboue water, a litle to the northwards of Monte Lauro, or the Sound of Moores, and lye from Monte Lauro west and by south. Also there lye a deale of rocks to the southwards of this Sound of Moores, and right in the midst of the Sound lyeth also a suncken rock, about southeast off from Monte Lauro.

For to saile into Mores

He that will saile into Moores, he must bring Monte Lauro northeast and by north of him, and saile in so right with it, & then he shall not come too neere the fowle ground or dangers: when he cometh then by Monte Lauro, he shal see the foresayd rocks lying out to the northwards of Monte Lauro, he must leaue them as also the poynt of Monte Lauro two or three cables lengths on the larbord side of him, and saile in so alongst by them, untill that he come past the second point, leaving the sunken rock (which lyeth in the midst of the Sound) on the starbord side of him: and when the fisher village which stands to the northwards of Monte Lauro, cometh to stand altogether bare, then he is within the sunken rock which lies in the midst of the Sound, south and by east easterly from the east end of the foresayd Fisher village.

When you come by the second poynt, you must run in about it within a cables length, & edge up to the northwards untill you come before the village, or up to the westwards before the towne, where you please, and anckor there in 12 or 13 fathom.

For to saile int& Rio Roxo.

If you will saile into Rio Roxo, then run about without the rockes which lye to the southwards of the Moores, and goe in southeast and by south, untill that you come before the haven of Rio Rosso, or Roxo, then you shall see a great many of rockes lying off from the northland, almost unto a great rock. or Iland called Salure: betwixt these rockes that lye out there, and the Iland Salure, you may well run through about to the northwards of the Iland, but it is very narrow, by reason of the aforesayd rockes, which lye off from the north land, therefore sayle about to the southwards of the same Iland, indifferent close alongst by it, leaving it on the larbord side, or to seawardes of you, untill that you see the Sound open, and then runne in keeping the middle of the channell, unto that Iland Roxo, which you shall see lye in the middest of the haven, when you come neere it, you may anckor under the southland, there are two Sandbayes, where is good anckor ground.

About two leagues southwest from Rio Roxo lyeth a suncken rock, *Iohn Claesz. Bors* of Sardam, did sayle upon it, and there lost his shippe the 20 of February 1613, in the night.

Ponte Vedra. M. Carbela Blydones.

From Rio Roxo, or the Iland Salure, unto Ponte Vedra, or the Iland Blydones, the course is southsoutheast foure leagues, betwixt them both lyeth an Iland called Monte Carbela; within it, it is three fathom deepe. Right before the haven of Ponte Vedra lieth the Iland Blydones, which men may saile round about. On the north side it is not deeper then fiue or sixe fathom: there lye also within the Sound, on the north side two rockes called the Boos, or Cxen. On the south side of Blydones is the right fareway for to sayle into Ponte Vedra, this haven lyeth in northeast untill within the Iland; somewhat further in, in the midst of the haven lieth also another litle Iland, which you must

Duytsche mijlen 15. in een Graadt

Spaansche mijlen 17½ in een Graadt

Eng. en Franſ. mijlen 20. in een Graadt

Ponte Vedra

Rio Roxo

Porto nova

Cambado

Pranev

S. Thomas

Villa nova

Grove

Monte Carbe

I. Salure

Dorp

Monte Lauro

Clip

Mores

Sreha

Corcobagona

Baja

C. de Finisterre

De Zeecuſten van Galiſſen tuſſchen de Cabo Finiſterre en Camino.

onte Vedra

Aldana

Rondela

Vigo

Cannas

Bayona

C. de Phaſtbis

Monte S. Rego

Camina

Camina

Mino R.

Blydones

d' Eylanden van Bayona

Hanover Bay

For the purpose of this Act, the Commissioner may, by order, declare that any waters in the Province are navigable waters.

Vessels in Canadian waters

Canadian vessels

Application of Act

Exception

Exception

Exception

muſt alſo goe to the ſouthwards of, therefore goe in eaſtnortheaſt alongſt by the ſouthland, untill that you ſee the flat tower which ſtandeth upon the ſouthland, & then you muſt run over a banck, right on with the poynt of Ponte Vedra, within it lyeth the towne, thwart of the flat tower men may anckor in 8 or 9 fathom: this haven is at ſome places 40 fathom deepe.

Ilands of Bayone.

Fiue leagues to the ſouthwards of the Ilands of Blydones, lye the Ilands of Bayone, when men come in out of the ſea right with them, then theſe Ilands do ſeeme to be all gray and black rockes, and lye to ſee to as if they were three Ilands, although that the ſea do run thorough them but at one place, betwixt each is a ſaddle, or valley.

Within the land alongſt over theſe Ilands, men ſhall ſee two high hills very good to bee known, the eaſtermoſt hath three high hommocks, and the weſtermoſt two with valleys betwixt the hõmocks; a litle to the eaſtwards of the eaſtermoſt hill men ſhall ſee a white Abbey ſtand againſt the high land, whereby this land is very good to be knowne,

For to ſaile into Bayone from the northwards.

You may ſaile within theſe Ilands of Bayona either to the northwards or to the ſouthwards; but at the northeaſt point of the Ilands lyeth a rock under water, about a cables length off from them, whereof you muſt take heed, and ankor in 10, 11, or 12 fathom on the eaſt ſide of the Ilands.

He that will ſaile in to the northwards, muſt run in betwixt the Ilands and the maine land, keeping neere about the middle of the channell, but neereſt to the Ilands, untill that the Sound of Vigo, or Cannas bee open, and then ſayle in to the eaſtwards, there is a broad Sound, where men may anckor on both ſides, to wit, on the ſouth ſide before Vigo, and on the north ſide before Cannas in twelue or thirteen fathom.

Vigo. Cannas.

Alſo men may ſayle further in about the ſouth poynt of Rondella, where men may ſaue a ſhippe in the roaze, without ankor or cable.

At the poynt of Vigo lyeth a litle Iland, he that commeth in to the northwards of the Ilands, and is bound in for Bayone, may ſayle through betwixt that litle Iland and the poynt of Vigo, right in with Bayone, to wit, alongſt a little to the weſtwards of the poynt, untill hee come before the towne, and anckor there in 4, 5, or 6 fathom.

Betwixt that foreſayd litle Iland, and the poynt of Vigo, it is at high water 4 fathom and a halfe, and at low water three fathom and a halfe deepe, men muſt (ſayling through there) giue the point of Vigo a birth, becauſe of ſome ſunken rocks that lye off from it. When that men lye in the roade before Bayone, in 5 or 6 fathom, they may ſee the Ilands of Blydones through betwixt the foreſayd poynt of Vigo, and that litle Iland.

From that ſame litle Iland lieth to the weſtwards another little Iland or rocke, betwixt them both it is fowle, ſo that men cannot ſaile through betwixt them, and from that weſtermoſt litle Iland lyeth a fowle riffe or ledge of rockes, ſouthweſt off towards the poynt of the land of Bayone, whereof men muſt take very good heed, whether you come from the northwards, and will ſaile through betwixt that riffe and the Ilands of Bayone, or els come in from the ſouthwards, betwixt the Ilands and the maine, and will goe in for Bayone.

That riffe lieth at low water at many places dry, the outermoſt rockes thereof, and the poynt of Bayone, where the Caſtle ſtandeth upon, lye ſoutheaſt and ſoutheaſt and by eaſt, and northweſt and northweſt and by weſt an Engliſh mile aſunder, therefore he that commeth from the nothwards, and will goe into Bayone to the weſtwards of that riffe, that is, betwixt the riffe and the Ilands, let him goe ſo long to the ſouthwards, untill that the Caſtle of Bayone come to be e.ſ.e. and eaſt and by ſouth from him, and ſaile then towards it, and then he ſhall run farre enough alongſt to the ſouthwards of it.

At the ſouth end of the Ilands of Bayone, lyeth a great rock, with a deale of ſmall rockes round about it, men may ſayle very cloſe alongſt by them, but at high water the outermoſt rocks lye under water, wherof men muſt be mindfull, cloſe by the rocks it is 20, and 25, and 26 fathom deepe. From the poynt of the maine land over againſt the ſouth end of the Ilands, runneth off a ledge of rocks, wherupon it breaketh very much, when the ſea is grown, whereof alſo men muſt take heed.

For to ſaile into the ſouthwards of the Ilands.

When you come from the ſouthwards, or out of the ſea, and will ſaile in for Bayone, about to the ſouthwards of the Ilands with a ſouther-ly or ſouthweſt wind, then run right with the ſouth poynt of the outermoſt land of Bayone, untill you come neere about a halfe league off the land, and then alongſt by the ſhore, unto the outer poynt on the ſouth ſide of the comming into the Bay, where that foreſayd riffe runneth off, which lyeth off low, giue that riffe a birth, and runne in betwixt it and the foreſayd rockes at the ſouth end of the Ilands, northeaſt, or eaſtnortheaſt in, according as you ſhall come in out of the ſea, leaving

leaving the riffe on ſtarboord, and the Rockes with the Ilands on the larboord ſide, untill that you come to the end, or to the northwards of the riffe; the north end, or the outermoſt poynt of that riffe at the ſouth point, and the poynt of Bayone where the caſtle ſtandeth upon, lye neareſt eaſt and by north, and weſt & by ſouth a litle league aſunder. When as then you haue the foreſayd riffe (on the ſouth ſide) upon your broad ſide, or els are to the northwardes of it, and that the caſtle doe ſtand eaſt or thereabouts from you, goe then right in with the caſtle, leaving that foreſayd other riffe (which lyeth off ſouthweſt from the litle Ilands at the poynt of Vigo) on the larboord ſide of you. If you bring the point of the caſtle, not to the ſouthwardes of e. ſ. e. then you cannot take any hurt of the northermoſt riffe.

The outer rockes of that northermoſt riffe, (which ſhooteth off from the two foreſayd litle Ilands) and the riffe which ſhooteth off from the ſouth poynt of the land of Bayone, where men muſt ſaile through betwixt, lye one from the other ſouthweſt, and ſouthweſt and by ſouth, and northeaſt and northeaſt and by north about an Engliſh mile aſunder. When you come neere the Caſtle, then come not very neere the ſhore, which is not very cleane, and when as then you come thwart of the innermoſt poynt of the caſtle, before that you begin to ſee the towne of Bayone, from behinde the poynt, you muſt looke well out before you: for from that ſame innermoſt point, and from the caſtle, there lyeth off a ſuncken rock, about halfe a cables length from the foreſayd poynt, whereupon remaineth at low water no more then nine or ten foote water, keepe therefore (thwart of it) ſomewhat off from the poynt. When as you begin to ſee the towne of Bayone, then luffe up ſuddenly ſouth, and ſaile before the towne, and anckor there in fiue or ſixe fathom, where you pleaſe, or els that the poynt of the Caſtle come againſt the weſtermoſt Iland of the two which lye off from the north poynt of the Bay, or poynt of Vigo, there it is good oaſie ground that holdeth well, ſet your anckors when you morre, northweſt and ſoutheaſt, the beſt ankor to the ſoutheaſt; from thence over the high land you ſhall haue commonly the hardeſt windes.

If you muſt turn to and againe into the bay, then take very good heed, when you run off from the Caſtle, that you run not too far over ſouthſoutheaſt; right before the towne, ſoutheaſt and by eaſt, and eaſtſoutheaſt from the roade about a musket ſhot, lyeth another ſunken rock, which at low water is even uncovered, it lyeth a ſmall cables length off from a litle poynt in the ſouth poynt of the Bay, whereupon ſtandeth a litle houſe, to ſee to a farre off like a great green rock; you muſt be very carefull of it, eſpceially when you runne over towardes the ſouthſoutheaſt.

For to ſaile into Vigo or Cannas from the ſouthward

But he that is bound into Vigo or Cannas, to the ſouthwards of the Ilands, ſhall ſaile in betwixt that ſouthermoſt Iland and the poynt of the land of Bayone, all alongſt in the middle of the channell, northeaſt, or northeaſt and by north in, at leaſt two great leagues, keekeeping the norther haven two ſhipps lengths open, ſo long until Cannas come to the north land without the poynt of Vigo: and then he muſt leaue the poynt of Vigo on the ſtarbord ſide of him, and run in (keeping the middle of the channell) betwixt the northland and the towne Vigo, and anckor there either before Cannas or Vigo, where hee pleaſeth in ten or twelue fathom.

S. Rego.

A litle to the northwards of Camina, lyeth on the coaſt a high ſteep hill, aboue in the top with a cliſt or ſaddle, being called S. Rego, it is almoſt of faſhion like Monte Lauro, but at leaſt once ſo high againe, this hill is a very good mark for to know the places thereabouts. About halfe wayes betwixt this hill and Bayone, lyeth an Abbey upon the ſide of the land, that is alſo a good marke for to know Bayone for him that commeth from the ſouthwardes, but the chiefeſt markes are the two foreſayd high hilles within Bayone, the one with two, the other with three hommocks. When that with the three valleys or ſaddles is e. ſ. e. from you, run in then right with it, you ſhal not faile to fall with the land, right with the Ilands.

Camina.

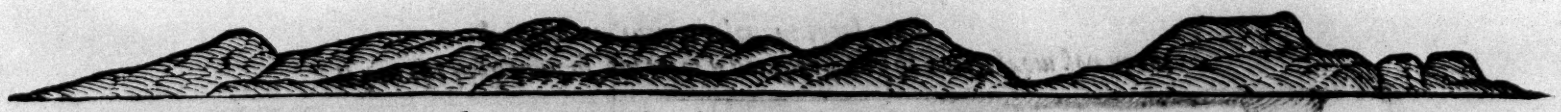
Fiue leagues to the ſouthwards of the Ilands of Bayone, lyeth the haven of Camina, a bard haven, where you muſt go in (with great ſhips) at the higheſt water. In the havens mouth, which lyeth in northeaſt and by eaſt, lyeth a rock neereſt the ſouth ſide; cloſe to the northwards of this rock, is the deepeſt water, for to ſaile in or out. Within in the haven, on the north ſide, lyeth a litle Iland, and upon it ſtandeth a litle tower, you muſt keep that over the tower which ſtandes upon the north land, and ſo muſt run in right with them.

In this havens mouth is at halfe flood two fathom water.

At the north ſide of the haven it is altogether ſhowld water, and very rocky and fowle: there ſhooteth off a ledge of rocks, or riffe, whereof men muſt take good heed.

How

How these lands do shew themselues at sea.

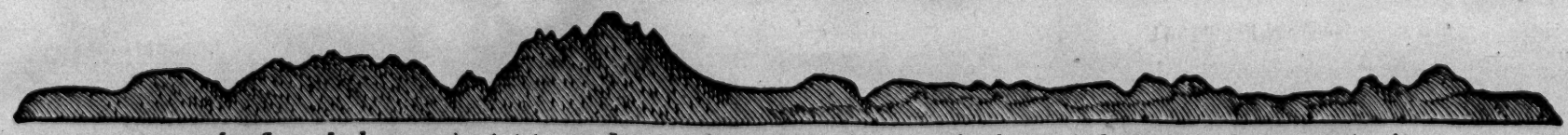


Thus doth Cape de Finisterre shew it selfe, when it lyeth fiue or sixe leagues east and by south from you.

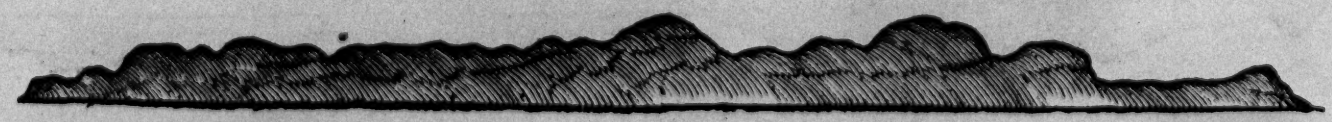
These three figures following belong one to the other, at the letter A A and B B, and shew the rising of the Capes de Coriane and Finisterre, as is shewed in the description here under following.

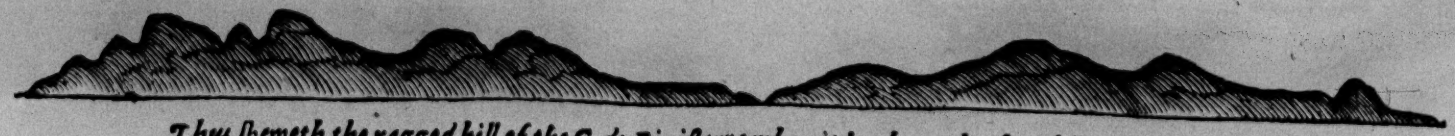
The Cape de Finisterre sheweth it selfe with the land to the southwards of it, as is portrayed in this and the figure following, when the ragged hill standeth east from you 3 or 4 leagues, and then you shall see the land to the northwards of it, vnto C. Coriane, northeast, vnto past C. Coriane, in forme as in the figure before this.

This followeth the former, and lyeth from the Cape off southeast and by south.



Thus sheweth the Cape de Finisterre, when the ragged hill lyeth eastnortheast easterly from you, and then the land of Moores lyeth from you eastnortheast, as is here following demonstrated.

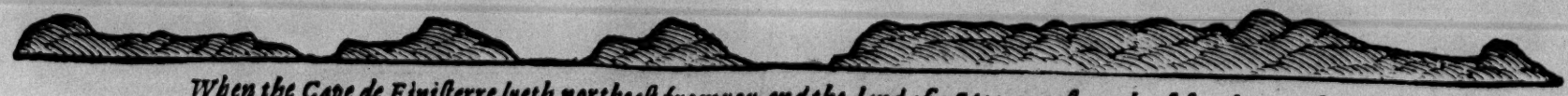




Thus ſheweth the ragged hill of the C. de Finiſterre when it lyeth northeaſt and by north from you.

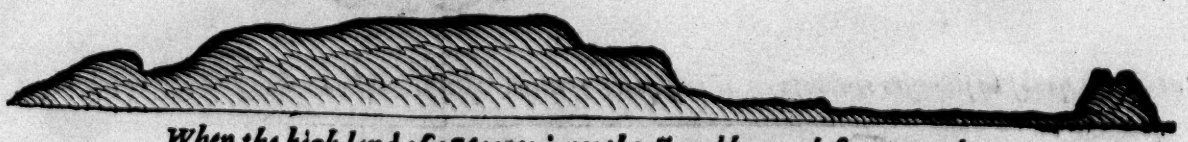
Cape de Finiſterre.

The land of Moores.



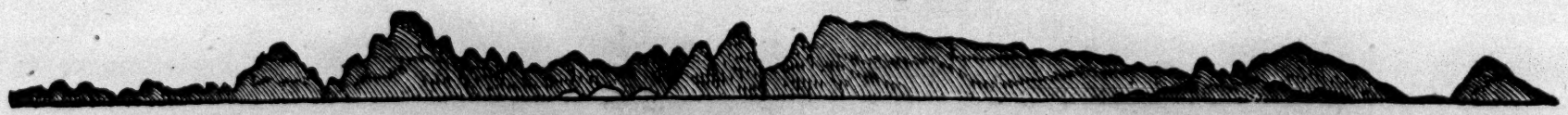
When the Cape de Finiſterre lyeth northeaſt from you, and the land of Moores eaſtnortheaſt ſixe leagues from you, then lyeth the Cape in three parts, and the land of Moores thus.

When the ragged hill betwixt the C. de Finiſterre, and Moores lyeth eaſt and by north from you 6 leagues off, then it ſheweth thus.

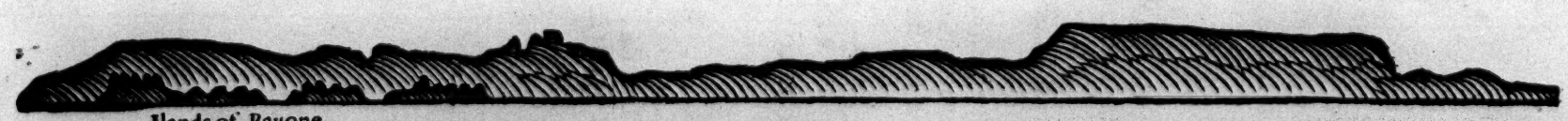


When the high land of Moores is northeaſt and by north from you about ſixe leagues, then it riſeth in this forme.

Monte Lauro The high land of Moores.



When Cape de Finisterre is northeast or northnortheast, and Monte Lauro is eastnortheast fiue leagues from you, the high land of Moores sheweth it selfe thus.

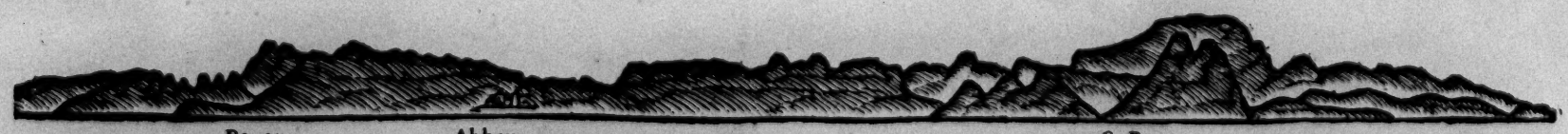


Ilands of Bayone.

Thus shew themselues the Ilands of Bayone, and the high land to the southwards of them, when the foresayd Ilands are eastsoutheast a league or two from you.

Bayone. Abbey. S Rego.

When the peynt of Bayone is eastnortheast, and the high land is east from you, then it riseth thus, to the southwards of it lyeth the high hill S. Rego.



Bayone. Abbey. S. Rego.

When the high hill S. Rego is east from you, then the high land of Bayone sheweth it selfe thus. The Abbey standeth about halfe wayes betwixt S. Rego and Bayone.

Of the tydes.

A Northeast and southwest Moone maketh on these Coastes full sea, like as on all the coastes lying on the great sea, there goe also no streames alongst the land, because (through the swelling of the Ocean sea) the flood commeth right on against the coastes, and falleth right in and out at the havens.

How these lands lye one from the other, and from other lands.

FRom C. de Finisterre to Moores, or Monte Lauro southeast 5 leagues.
From Rio Roxo to Ponte Vedra southsouthwest 4 leagues.
From Ponte Vedra, or Blydones to the Ilands of Bayone southsoutheast 5 leagues.
From Bayone to Camina south and east 4 leagues.
From Cape de Finisterre to the Ilands of Bayone, the course is southeast and by south 18 leagues.
From Cape de Finisterre to Port a Port southsoutheast 44 leagues.
From C. de Finisterre to Avero south and by east 53 leagues.
From C. de Finisterre to the Burlings south 67 leagues.

From Cape de Finistere to the great Canaries southsouthwest southerly 307 leagues.
Prom C. de Finisterre to the Salvages southsouthwest 273 leagues.
From Cape de Finisterre to the Ile of Madera southwest & by west southerly 197 leagues.
From Cape de Finisterre to the Ile S. Michiell westsouthwest 247 leagues
From C. de Finisterre to the Ile Tercera westsouthwest, and west & by south 278 leagues
From Cape de Finisterre to the southwest poynt of Ireland north and by west, and north 173 leagues
From Cape de Finisterre to Cape de Claro north 173 leagues.
From Gape de Finisterre to Waterford, or the southeast poynt of Ireland north & by east 185 or 186 leagues.
From Cape de Finisterre to the Lizart northnortheast 153 leagues.
From C. de Finisterre to the Seams northeast and by north northerly 112 leagues.
From C. de Finisterre to Bell-Ile northeast 122 leagues.
From Avero the Burlings southwest 20 leagues.
From Bayone to the Burlings south and by west 49 leagues.

Heights.

THE Cape de Finisterre lyeth in 43 degr.
Bayone lyeth in 42 degr. 10 min.

The

Duytſche mylen 15 in een Graadt

Spaanſche mylen 17½ in een Graadt

Eng. en Franſ. mylen 20. in een Graadt

Port a Port

R. Limas

Viana

Barra

Ville del Conde

Zurara

Espoſende

Nivos

Carico

De Zeecusten van Portugal van Viana tot Avero.

Port a/ Port

Cloester

Villa nova

Mirigay

Meligay Cloester

Duvels hus

witte torren metter Jat

S. Jacobus

Maserel

Clusenaer

Aveiro

Incasa

Soutlandt

Sout landt

Sout landt

Lagos

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CHAP. III.

The coaſtes of Portingall from Camina to Avero.

Viana. SEVEN leagues to the ſouthwards of Camina lyeth Viana upon a river. From the north poynt lyeth off a ledge of rockes thwart over before the mouth of the river, and upon the ſouth ſhore, ſtand two Fire-towers. If you will ſaile into this river of Viana comming from the northwards, or out of the ſea, then run ſo long to the ſouthwards untill that the two foreſayd Fire-towers upon the ſouth ſide of the rivers mouth, come one in the other, and then run in right with them towards the ſtrand, untill that the litle tower upon the north land come over the two houſes; keepe them one in the other, and runne then to the rocke with the maſt, and ſaile alongſt cloſe to the eaſtwardes of it, and then you run in alongſt over the Barre or the ſhowldeſt of the rivers mouth, there is at low water with an ordinary tyde two fathom depth. When you are paſt the foreſayd rock with the maſt, then you ſhal ſee yet a head another rock with a maſt or beacon, which lyeth on the north ſide of the river: run in likewiſe cloſe alongſt to the ſouthwards of it, and afterwards indifferent cloſe alongſt by the northland, untill you come before the town, there runneth off ſometimes a litle riffe which you muſt giue a birth to, and anckor before the town. When you lye before the towne, there lyeth a litle Iland to the ſouthwardes of you, whereupon ſtandeth a little Chappell, to the weſtwards of that litle Iland lyeth a great Banke, which at low water is uncovered, behind that banck it is fiue and ſixe fathom, and before Viana ſeven, eight, and nine fathom deepe; when men come in, they may run in about to the ſouthwards of this foreſayd Banck, and come out again before the town, by the litle Iland, where the litle houſe ſtandeth upon.

When you come in about a bow ſhot within the ſecond rock with the maſt, there you may well let fall your anckor, and bring Cables on the ſouth ſhore, and morre there by foure cables.

Men may anckor without in the road in 12 fathom, there is the cleaneſt ground for to take in a Pilot. It is a narrow and dangerous barre for to come into.

Villa del Conde. From Viana to Port a Port the courſe is ſouth & by eaſt 12 or 13 leagues, betwixt both lyeth Villa del Conde, 7 leagues from Viana, and from Metelyn. Villa del Conde is a bard haven, before the havens mouth lye many rockes, where men may ſaile in about them on both ſides, to the northwards or to the ſouthwards of them it is fiue and ſixe fathom deepe; further in lyeth a banck thwart over the haven of two fathom at high water: within in the haven it is 3 or 4 fathom deepe, on the north ſide it is all full of rocks, which lye moſt under water, but on the ſouth ſide it is deepeſt and ſureſt, and good lying in fiue and ſixe fathom.

Leſons Rockes. Foure leagues to the ſouthwardes of Villa del Conde, lye out the great rocks called Leſons, right before a little bard haven of two fathom depth, called Mettelyn, and ſouthweſt from the ſouth poynt of the foreſayd rockes Leſons, about a halfe league to ſeawards, lyeth a ſuncken rock under water: betwixt the land and the Leſons it is 6 and 7 fathom deep.

Port a Port. A league to the ſouthwardes of the rockes Leſons lyeth Port a Port. From the north poynt of the rivers mouth lye off many rockes, almoſt thwart over the channell. For to ſaile in there, you muſt run in cloſe alongſt to the ſouthwardes of the outermoſt rock, even ſo neere by it, that you may caſt with a ſtone upon it. There ſtandeth a little chappel upon the north ſhore right againſt the rock with the croſſe, and alſo a litle white houſe upon the north ſhore ſomewhat further up upon the river, bring them one in the other, and run in ſo right with them until you be paſt the Caſtle. In ſayling in ſo, you ſhall not finde leſſe upon the ſhowldeſt of the Barre, then 17 or 18 foote water at halfe flood, and ſhall not come too neere a ſuncken rock, which lyeth without in the rivers mouth, ſomewhat neerer the ſouth ſhore then the north, whereupon there remaineth at low water no more then 11 or 12 foote water. Being within the caſtle, goe then right towardes the rock with the croſſe, and ſo cloſe alongſt to the ſouthwards of it, that you may reach it with a boat-hook, or els you muſt run in three or foure ſhippes lengths to the ſouthwardes of it, or alongſt by the ſouthland, untill you be paſt the rock with the croſſe, for to avoyd a ſuncken rock, which lyeth thwart of it a little to the ſouthwards of it, and at low water is no more then 8 foot under water. Being a little paſt the rock with the croſſe, go then up alongſt in the middle of the chanell, untill you come thwart of a great white tower upon the northland, there you may ankor in 4 or 5 fathom, or ſaile before the towne, there it is 3 and 4 fathom deepe. A litle paſt the rock with the croſſe is a ſhowld, whereupon remaineth at low water no

more then 11 foot water, ſo that with ſhippes that draw 12 foote water, men muſt ſtay for high water, it floweth there ſixe foot up and downe with an ordinary tyde.

On the ſouth ſide of the river goeth in alſo a Land-diep to the ſouthwards of the foreſaid ſunken rock, which lieth in the rivers mouth, where the Pilotes ſometimes alſo bring ſhipps in and out; that is ſometimes a good channel, and oftentimes it is caſt too againe of the ſea, ſo that there is no certainty to be written of it, that men ſhould truſt upon.

From Port a Port to Avero, the courſe is ſouth ten leagues: betwixt them both it is all alongſt a cleane ſand ſtrand, where men may be bold to come neere the ſhore every where in ten or twelue fathom.

Within the land upon the high land lyeth a black hommock in the land, when that lyeth e. ſ. e. from you, then you are open before Avero: when you cannot ſee the black hommock of Carmole, then lyeth there a rough ſand-hill to the northwards of the Barre, when that is thwart of you, then are you a halfe league to the northwards of the Bar of Avero.

If you will ſaile in over the Barre of Avero, and that you come before it in ſixe or ſeven fathom, then take heed to three beackons made of maſts, which ſtand upon the ſouthland, bring them one in the other, and ſaile in ſo right with them eaſt and by ſouth, and e. ſ. e. in over the barre, there is in comming in, at halfe tyde, no more then two fathom water, untill that you come by the beakons, you ſhal ſo (being come within the points) ſaile alongſt by a dry ſand on the larbord ſide, edge then up northnorthweſt, and northweſt about by that foreſayd dry ſand, untill you come cloſe to the norther land, and run in by it, and then you ſhall leaue all the other ſhowlds on the ſtarbord ſide, untill that you ſee the river open, & then you ſhall ſee a litle houſe upon the ſtrand on the weſt ſide, goe then from thence up into the river, eaſt and by ſouth, and eaſtſoutheaſt, keeping the middle of the channel betwixt the two lands, untill you come before the Saltponds or Avero, where you may lade your ſhip with ſalt.

The coaſt of Portingall about Viana, is very good to be knowne, by the foreſayd hill of S. Rego, which is exceeding high, & lyeth on the ſea ſide: the high land of Viana lyeth two or three double within it.

Betwixt Viana, Villa de Conde, and Port a Port, men ſhall ſee alongſt the coaſt many towers and litle houſes, Villa del Conde men ſhall ſee at ſea like a great towne.

The River of Port a Port men may know by the rocks Leſons, they are very high, and lye a litle to the northwardes of the River.

The Cape de Montego is a high poynt, and within it in the land are high mountains. This Cape is ſomtimes taken to be the Rock, but is eaſie to bee diſcerned from it, becauſe of the Burlings, which lye here to the ſouthwards, and to the northwardes of the Rock.

Of the tydes.

A Southweſt and northeaſt Moone maketh at all theſe places (on the ſea ſide) high water, and within in the havens a poynt or two later, according as they lye farre within the land.

How theſe lands doe lye one from the other, and from other lands.

FRom Camina to Viana ſ. ſ. e.	7 leagues.
From Viana to Villa del Conde ſouth and by eaſt	7 leagues.
From Villa del Conde to Port a Port ſouth and by eaſt	5 leagues.
From Port a Port to Avero ſouth	10 leagues.
From Avero to Cape de Montego ſouthſouthweſt	7 leagues.
From Port a Port to the Burlings ſ. ſ. w. and ſouthweſt and by ſouth	29 leagues.
From Avero to the Burlings ſ. w.	20 leagues.

Heights of theſe landes.

POrt a Port lyeth in	41 degrees.
Avero in	40 deg. 26 min.

Hovv theſe lands do ſhevv themſelues at ſea.

S. Rego.

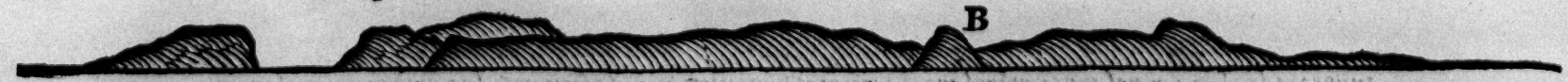
Thus ſheweth the coaſt of Portingall from Bayone to Cape Montego, when you ſaile alongſt by it, about foure leagues off, the figure following belongeth hereto, at the croſſes one to the other.

Cape de Montego.

When that black Hommock where the hand ſtandeth by, is eaſtſoutheaſt from you, then are you thwart off, or open before Avero.

The high land of Viana.

B



Thus ſheweth the land of Viana and to the ſouthwards of it the Hommock by B is two leagues to the northwards of Villa de Conde.

The high land of Viana.

V

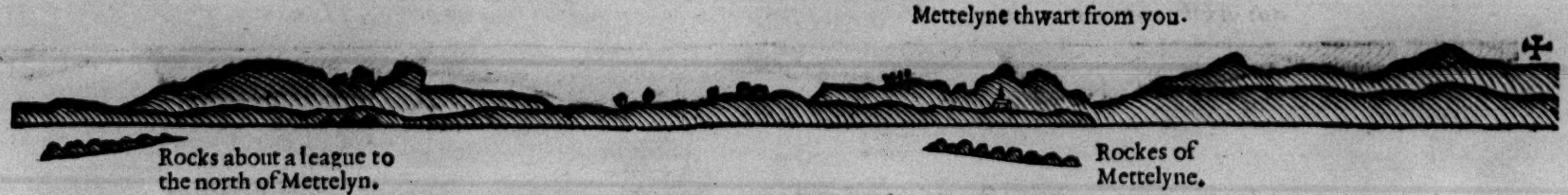
The land by Viana, and to the ſouthwards of it towards Villa de Conde, ſheweth as is portrayed in this and the figure following, by V, is the rivers mouth of Viana.

C

Villa de Conde.

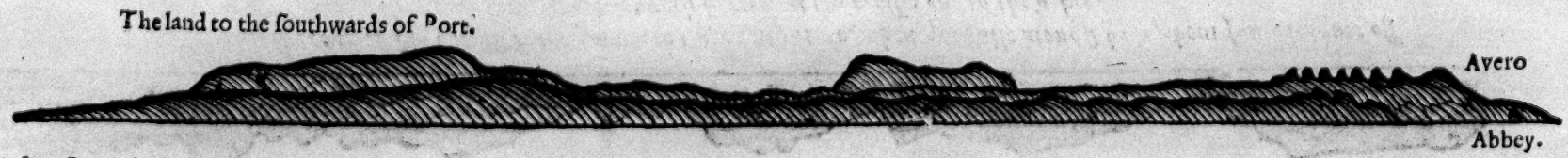
This followeth the former figure the Hommock at C is two leagues to the northwards of Villa de Conde.

Thus ſheweth the foreſayd land of Viana, and to the ſouthwards of it, when Viana (being by A) is northeaſt from you ten leagues.



Thus ſheweth the land by Mettelyn, when Mettelyn is thwart from you, and that you are cloſe by the land.

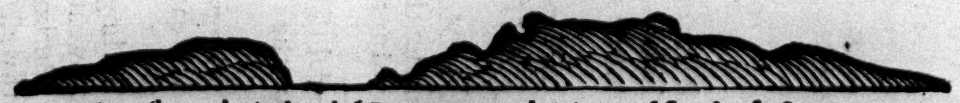
This figure belongeth to the former, and ſheweth the forme of the land by Port a Port, and to the ſouthwardes of it, when you come from the ſouthwards, you ſhall ſee a little village, within the caſtle of Port a Port, called S. Iohn. A league to the northwards of it lyeth Mettelyn.



Thus ſheweth the land betwixt Port a Port and Avero, when the high land to the ſouthwards of Port is eaſt and by ſouth from you 4 leagues.

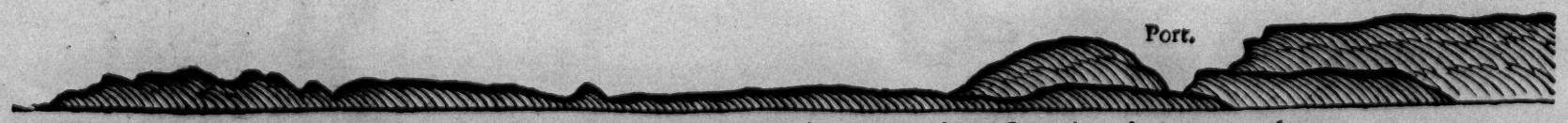
Thus

Thus ſheweth the land of Port when you come from the ſouthwards.



Thus ſheweth the land of Port a Port when it is eaſtſoutheaſt from you about foure leagues.

Thus ſheweth the land from the northwards of Viana to Port a Port, when you ſaile along ſt by it.



When Port a Port is ſoutheaſt from you ſeven or eight leagues, then it ſheweth with the land to the northwards of it, in this forme.

CHAP. IIII.

From Avero to the Rock.

THE Cape de Montego lyeth from Avero ſ.ſ.w. diſtant 7 leagues: a league to the ſouthwards of it lyeth Piſſage, or the River of Montego, a bard haven. From the Cape de Montego runneth off a fowle ledge of Rocks, a good wayes from the ſhore, which men muſt avoid. Vnder the Cape men may ride for northerly winds in ſeven or eight fathom, a northnorthweſt wind commeth right from the poynt, for ſoutherly winds men may ankor to the ſouthwards of the river of Montego.

From the ſouth point of the River runneth off a ſand-riffe; when you ſaile in there, and that you come in out of the ſea, it ſheweth as if you might ſaile in to the ſouthwardes of that riffe, but it is not to be done: you muſt ſayle in to the northwards of it. Vpon the north point ſtandeth the litle village S. Catharina, and a litle to the northwards of it a Fiſher village called Buarcos. Vpon the north ſide within the havens mouth ſtandeth a lime kill, with a wood of Fig-trees, when you bring them one in the other, and then ſaile ſo right in with them, you runne in right in the channell, there is ſometimes no more then twelue or thirteene foot water at halfe flood: you may not certainly truſt to the deſcription of this haven; for in regard it is there ſand-ground, it doth ſhift ſometimes with the great Freſhuts that come off the River, and alſo with ſtorms out of the ſea. From Cape de Montego to Peniche, or nova Lisbona (at the Cabo del Fiſiron which is the poynt within the Burlings) the courſe is ſouthweſt & by ſouth ten leagues, there lyeth off a rock from the poynt, to the ſouthwards of it is a great bay, where men may run in behind it with barks, and lye landlockt. In that bay lyeth a little towne againſt the high land called Artogie, a litle to the ſouthwardes of the Cape del Fiſiron lyeth a high round hommock, which the Dutchmen call yong Roxent.

From the Cape Montego to the Burlings, the courſe is ſouthweſt twelue or thirteene leagues. Behind the Burlings is agood roade and anckor ground, under the great Iland before the Ermitage, then you may anckor in ten fathom, you may come in there from the northwards or from the ſouthwards, it is there broad and wyde, and every where cleane.

From the Burlings to the Rock, or Roxent, the courſe is ſouth and by eaſt, and ſouthſouthеaſt ſixteen leagues, but from the C. del Fiſiron (behinde the Burlings) to the Rock, the coaſt lyeth ſouth and north fifteene or ſixteen leagues. The Rock or Roxent is a poynt of land very good to bee knowne, although you be a great wayes off, yet you ſhall alwayes ſee the ſharpe hommock of the Abbey of Syntra.

Of the tydes.

AS on all the coaſts of Portingall, even ſo here alſo on theſe coaſts a ſouthweſt and northeaſt moone maketh the higheſt water.

How theſe lands lye one from the other, and from other lands.

FRom C. de Montego to Peniche, or Cape del Fiſiron ſouthweſt & by ſouth 10 leagues
From C. de Montego to the Burlings ſouthweſt 13 leagues.
From Cape del Fiſiron, Peniche, or nova Liſbona, to the Rock, or Roxent ſouth 15 or 16 leagues.
From the Burlings to the Rock, or Roxent, ſouth and by eaſt, and ſ.ſ.e. 16 leagues.

From the Burlings to the Cape S. Vincent ſouth and by eaſt 53 leagues.
From the Burlings to the great Canaries, ſouthſouthweſt 248 leagues.
From the Burlings to the Iland Palma ſouthweſt and by ſouth 256 leagues.

Heights.

CApe de Montego lyeth in 40 deg. 8. min.
The Burlings in 39 deg. 40. min.

P O R T V G A

P A R

t'gat van Aveiro

Rio de Mondego

Figueira

S. Cabo

Buarcos

Pyßage

C. de Montego

Alcoyne

Pemiche

A L L I Æ

R S

De Cuſten
van Portugael
tuſſchen Avero en
Roxent

Duytſche mijlen 15 in een graedt

Spaenſche mijlen 17½ in een graedt

Eng: en Fr: mijlen 20 in een graedt

S. Giclis

Tonge Roxent

Mt. de Roxent

C. Roxent

20 25 25 25

98

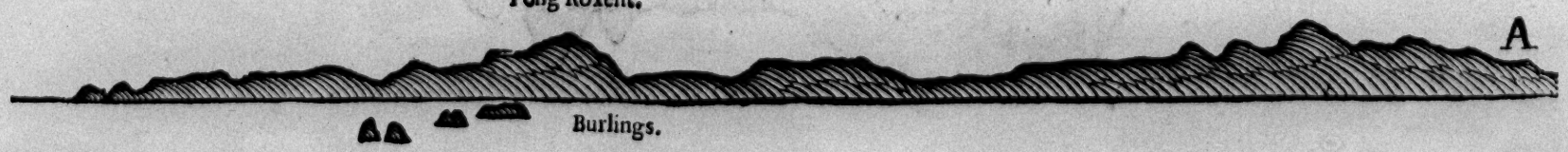
How these lands do shew themselues at sea.

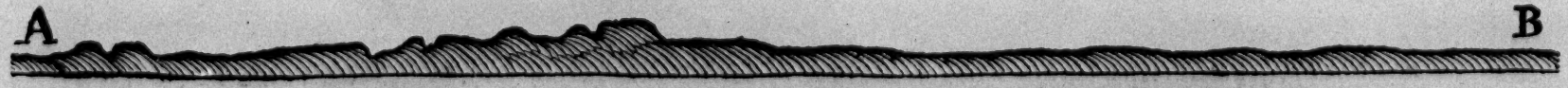
The C. de Montego being northeast from you foure or fiue leagues with the land to the southwards of it, sheweth it selfe as is portrayed in this and the figure following at the letters A A they belong one to the other.

This belongeth to the former, and is the land to the southwards of Montego, untill thwart of the Burlings.

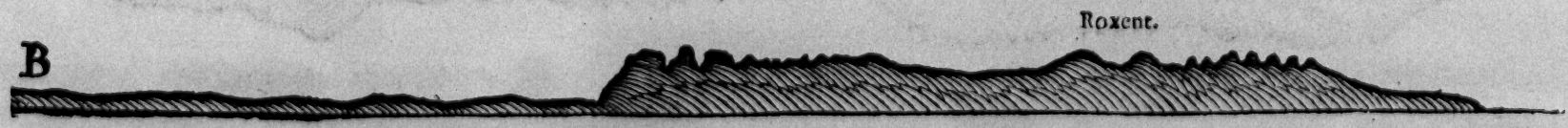
Thus then shew the Burlings when the northermost are east from you a league.

The land betwixt Peniche and Roxent, or the Rock, sheweth it selfe as is portrayed in these three figures following, when the high land to the southwards of Peniche, being called yong Roxent, is east from you, the like letters, as A A and B B belong one to the other.





This belongeth to the former figure, and is the land to the northwards of the Rock, or Roxent.

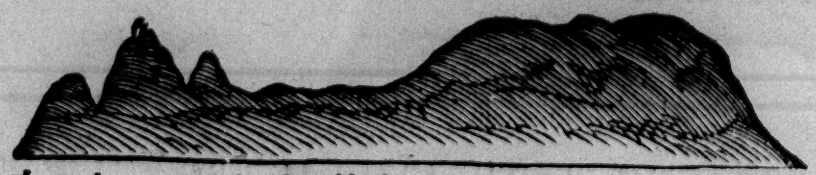


This followeth the former figure, untill Roxent, or the rocke, at the B one to the other.

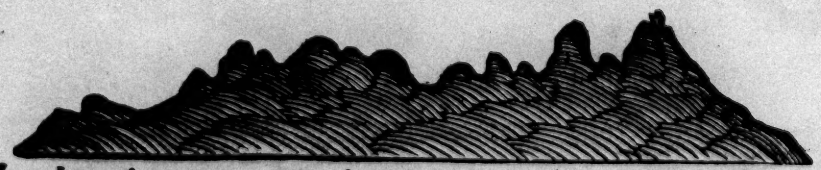
Yong Roxent northeaſt and by eaſt.

Roxent ſouth and by eaſt.

Thus ſheweth the Rock, or Roxent when it is ſouth and by eaſt, and yong Roxent is northeaſt and by eaſt from you, and that you are cloſe by the land.



When the Rock or Roxent is eaſt and by ſouth, and eaſtſoutheaſt from you ſeven leagues, it ſheweth it ſelfe thus.



When the Rock or Roxent is northeaſt from you ſeven leagues, it ariſeth thus.

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng: en Fr: mylen 20 in een graedt

Slot van Palmelo

Wit huys

Soutlant

Alcouchete

PORTVGALLIÆ

Lilbona

Palhais

Coma

PARS

Belem

Bethlem

Almada

S. Catrinen Cloosters

Rossers

Rio Tagus

S. Cielis

Zuyder cachops

Sintra

Cabais

H. d. Roccas

Noorder cachops

Cabo dest

St. Vincx hoeck

Tizembra

C. Roxent

C. de Spichel

Setubal ofte
St. Vves

Soudlandt

Zeecaart
van de Rivier
van Lisbon en
de bancken voor
St. Vves

Vrije

Les Bancques

Spichol

99

CHAP. V.

From the Rock, or Roxent, to the Cape S. Vincent.

Caſcalis.

A Great league to the eaſtwards of the poynt of Roxent, or the Rock, lyeth the road of Caſcalis, where men may lye land-lockt for a northweſt, north, & northeaſt winde, in twelue or thirteene fathom, ſo deepe or ſhowld as they will. A great league to the eaſtwards of Caſcalis, lyeth the poynt of S. Iulian, or S. Gillians, whereupon ſtandeth a ſtrong caſtle, that is the north poynt of the River of Lisbone, the norther channell of the river goeth in within a bowles caſt, alongſt by it.

S. Gilles, or S. Gillians.

For to ſaile in at the norther channell.

For to ſaile into the norther channell, you muſt run in alongſt within the length of a maſt alongſt by the foreſayd poynt, but comming before the caſtle of S. Gillians, you muſt edge ſomewhat over towards the Carrick deepe, for to avoyd ſome fowle ground and rocks, which lye on the eaſt ſide of the Caſtle. Being paſt that a litle, you may luffe up againe towardes the north ſhore, and ſaile alongſt by it to Reſtiers, and ſo forth even to Lisbone, men doe commonly anckor before the Village of Bolyn in twelue or thirteen fathom. Men muſt take heed not to come into this channell with calme weather, and with an ebbe, which falleth very ſtrong upon the norther Cachops: this channell of S. Gillians lyeth in eaſt and by ſouth; being within, you muſt ſaile up eaſtnortheaſt, and northeaſt and by eaſt, and when you come againſt the Abbey at Reſtiers, then you muſt edge ſomewhat over towards the ſouth land, els you muſt keepe the northland all alongſt.

For to ſaile in at the Carrick deepe.

For to ſaile into the Carrick deep, you ſhall bring Caſcalis, over the weſt point of Roxent, and keepe it ſo, untill that the little tower (which you ſhall ſee ſtand aboue the Abbey at Reſtiers) come over the white Abbey which ſtandeth fartheſt from Reſtiers, to wit, over S. Katherines Abbey or Cloyſter, goe then northeaſt, and northeaſt and by north in, keeping theſe marks ſtanding thus, untill that you come within the poynt of S. Gillies, and then goe in alongſt by the northland to Reſtiers within the Caſtle, and ankor there where you think it beſt. Vpon theſe markes you may ſayle in and out at the Carrick deepe. If you come from the weſtwards, and will goe in to the Carrick deepe, then bring Caſcalis over the weſt end of Roxent, and ſayle ſo about the norther Cachops, untill that the towne of Lisbone come within two ſhips lengths neere to the ſouth ſide of the River, & then further in northeaſt and by north; when as then you ſhall ſee the ſand-bay within the poynt of S. Gillians, then are you in the right fareway.

But if it ſhould happen, that you could not ſee the towne, or the little tower, then keepe the ſand-bay (which lyeth within S. Gillians poynt) northeaſt and by north from you, and ſaile ſo northeaſt and northeaſt & by north in, and take the ſounding of the norther Cachops in eight or nine fathom: when you begin to come againſt S. Gillians poynt, ſayle then indifferent cloſe alongſt by the northland, as is before ſayd.

He that will turne out or in to the Carrick deepe, muſt bring the foreſayd litle tower that ſtandeth within the land, a ſhipps length to the ſouthwards, & a ſhips length to the northwardes of the foreſayd Abbey or Cloyſter of S. Katherines, and then caſt about every time, and ſo turne to and againe out and in.

Alſo come not with calmes in this chanell, (neither bound inwards nor outwards) with an ebbe, for it falleth very ſtrong over the eaſt end of the Cachops.

If you will run out at the Carrick deepe, you muſt looke out for the foreſayd litle tower: when it commeth out from under that high land, bring it then a litle to the weſtwardes of the ſecond white Abbey or Cloyſter, and goe away ſouthweſt and by ſouth, and then the litle tower ſhall come to the Cloyſter.

But if you muſt turne out to and again, then you muſt be very carefull of your tyde, for the ſtreames fall very ſtrong over the Cachops, ſo that it is very dangerous with calmes to come in or out at theſe channels, but eſpecially in ſayling out with an ebbe, for it falleth thwart over the Cachops.

S. Vues poynt.

From Roxent to S. Vves poynt, the courſe is ſoutheaſt and by ſouth ten leagues, that is alſo a poynt good to be known, by a high round hill which lyeth on it, alſo men ſhal ſee the top of the caſtle of Siſembre upon a flat hill like a great top or ridge of a countrey houſe.

S. Vves poynt is called Cape de Pitcher, and by the Dutchmen Cape de Spichell, a litle to the ſouthwards about the point, is a rent or clift in the land, before it is good riding in 9 and 10 fathom. Before Siſember men may alſo anckor in 15 or 16 fathom.

Road under S. Vues poynt.

Fiue leagues to the eaſtwardes of Cape Pitcher, or S. Vves poynt, lyeth S. Vves, there lyeth a great banke before the havens mouth. Beneath the high land upon the water ſide,

ſtandeth a white caſtle, when that is north-northeaſt from you, then are you right before the havens mouth.

For to faile in over the the banke before S. Vves.

If you will faile over the banks into S. Vves coming off from C. Pitcher, or S. Vves point, then keepe the weſt poynt of Siſember a ſhips length without the eaſt poynt, and goe then eaſt, and eaſt and by north on, untill that the caſtle of Palmelo which ſtandeth aboue S. Vves, commeth in a valley over the foreſayd white caſtle upon the water ſide. Saile then northnortheaſt right in with them, untill you come within the caſtle that ſtandeth upon the water ſide, and then in alongſt within a cables length by the northland northeaſt and by eaſt, untill you come before the towne of S. Vves, or Setuball. But when the Caſtle of Palmelo commeth under the land, that you cannot ſee the ſame any more, there ſtandeth alſo a white houſe on the north ſide of the caſtle that ſtandeth on the water ſide, keepe that then ſo ſtanding, and run in right with them, untill you come within the white caſtle, and goe then in (as before is ſayd) alongſt by the north land, untill you come before the towne of S. Vves, and ankor before the Fiſher village in ſixe or ſeven fathom. Vpon the banke is at halfe flood three fathom and a halfe water, when you ſaile in over it, you ſhall finde at leaſt ſeven divers ſhowlds. There goeth in alſo a channell alongſt by the ſouth land, but that is onely for barkes: betwixt this ſouther channell and the right deep lye the bankes at ſome places ſo ſhowld, that they lye almoſt aboue water.

For to finde the deepeſt water in ſailing out over the banck of S. Vves, with ſhippes that draw much water, doe thus: when you ſaile out from the white caſtle, then bring the foreſayd white houſe over the north ſide of the caſtle, that ſtandeth on the water ſide, ſo that you may ſee directly through betwixt them, and keepe them ſo ſtanding, untill that S. Uves poynt begin to come without the eaſt point of Siſember, then bring the white houſe to the ſouth ſide of the Caſtle, and run ſo out, you ſhall haue there the deepeſt water. But when you can ſee that caſtle of Palmelo, that is a direct alongſt mark for to run over the bancke: And then that white caſtle muſt be from you northnortheaſt northerly.

It is from S. Vves poynt to Cape de S. Vincent ſouth and ſouth and by eaſt 29 leagues, betwixt both are no knowne havens. Salines a litle river lying halfe wayes, is alſo unknown. Salines.

Of the tydes.

A Southweſt and northeaſt Moon maketh on theſe coaſts full ſea, within the havens a poynt or two later, according as they lye far within the land.

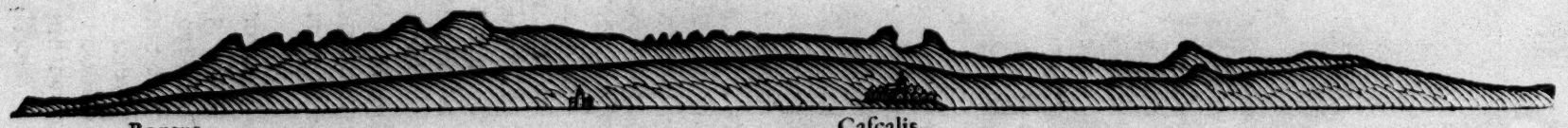
How theſe lands lye one from the other, and from other lands.

From Roxent to the C. Pitcher, or S. Vves poynt ſoutheaſt and by ſouth 10 leagues.
From C. Pitcher to the Cape S. Vincent ſouth and ſouth and by eaſt 29 leagues.
From Roxent to the Cape S. Vincent ſouth & by eaſt 37 leagues.
From Roxent, or the river of Lisbone, to the great Canaries ſ.ſ.w. weſterly 240 leagues.
From the river of Lisbone to the Ile de Salvages ſouthweſt and by ſouth 208 leagues.
From the River of Lisbone to Porto Santo ſouthweſt 160 leagues.
From the River of Lisbone to the Ile Madera ſouthweſt 173 leagues.
From the River of Lisbone to the Iland Tercera weſt 273 leagues.

Heights.

Roxent lyeth in 38 degrees 52 minutes, or as ſome hold in 39 degrees.
Cape Pitcher, or S. Vves poynt lyeth in 38 degrees 25 minutes.

Howv theſe lands do ſhevv themſelues at ſea.



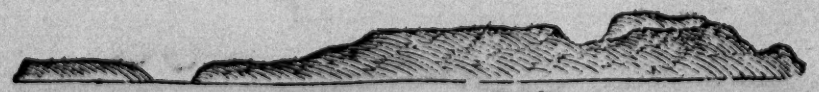
The land to the eaſtwards or to the ſouthwards of Roxent towards Reſtiers, ſheweth it ſelfe as ſtandeth portrayed in this and the figure following.

This belongeth to the former.

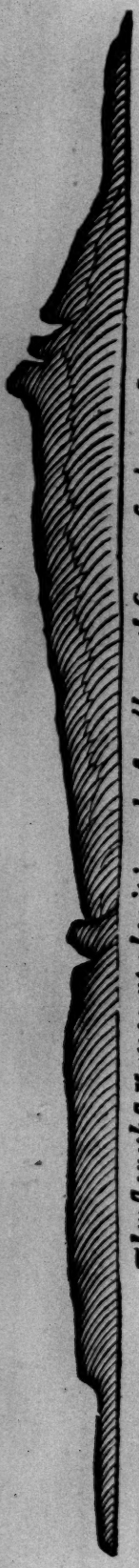
Cape Picher.

Thus ſheweth the coaſt betwixt the River of Liſboue, and S. Vues poynt, called C. Pitcher.

Thus ſheweth S. Vues poynt when you come from the northwards.



Thus ſheweth S. Vues poynt when it lyeth eaſt and by north 6 leagues from you.



CHAP. VI.

The Coastes of Algarue from the Cape S. Vincent to Ayemonte.

FROM Saint Vves to Cape S. Vincent, the coast lyeth most south & by west about 32 leagues, betwixt both lye some high steepe hils, which men doe call the Salines, which are very good marks for to know this coast by, but aboue all serue for the knowledge of this coast of Algarve, or of the Cape de S. Vincent, the Vigheberghen, or Mount Chigo, which lye within Lagos, and may be seen farre off at sea. A halfe league to the northwardes of Cape S. Vincent lyeth a high cliffe in the land, that is somewhat whitish, and higher then the other land; when you see that, then you are by the Cape de S. Vincent. Vpon the poynt of the Cape standeth a broken Abbey or Cloyster, and close by the poynt lyeth a high rock, being called by the Dutch sailers Monnick strandt.

A little about the poynt of the Cape S. Vincent men may ankor in a sand-bay, for a north and northwest wind in twenty fathom.

Road under Cape S. Vincent.

About the second poynt, to the eastwardes of the Cape, is another Sand-bay, there is a good road for a northwest and north winde in 14 or 15 fathom. From the Cape de S. Vincent to Cape S. Maries, or Faro, it is east or a litle more southerly ninteene or twentie leagues: betwixt them both lye Lagos, or Laves, and Villa Nova. From Cape S. Vincent to Lagos, it is east and by north seven leagues, there is a tyde-haven through betwixt the rockes, behind a strand of chindle, which falleth dry at low water, men may also ride there for a northwest, westnorthwest, & north wind, inten or twelue fathom.

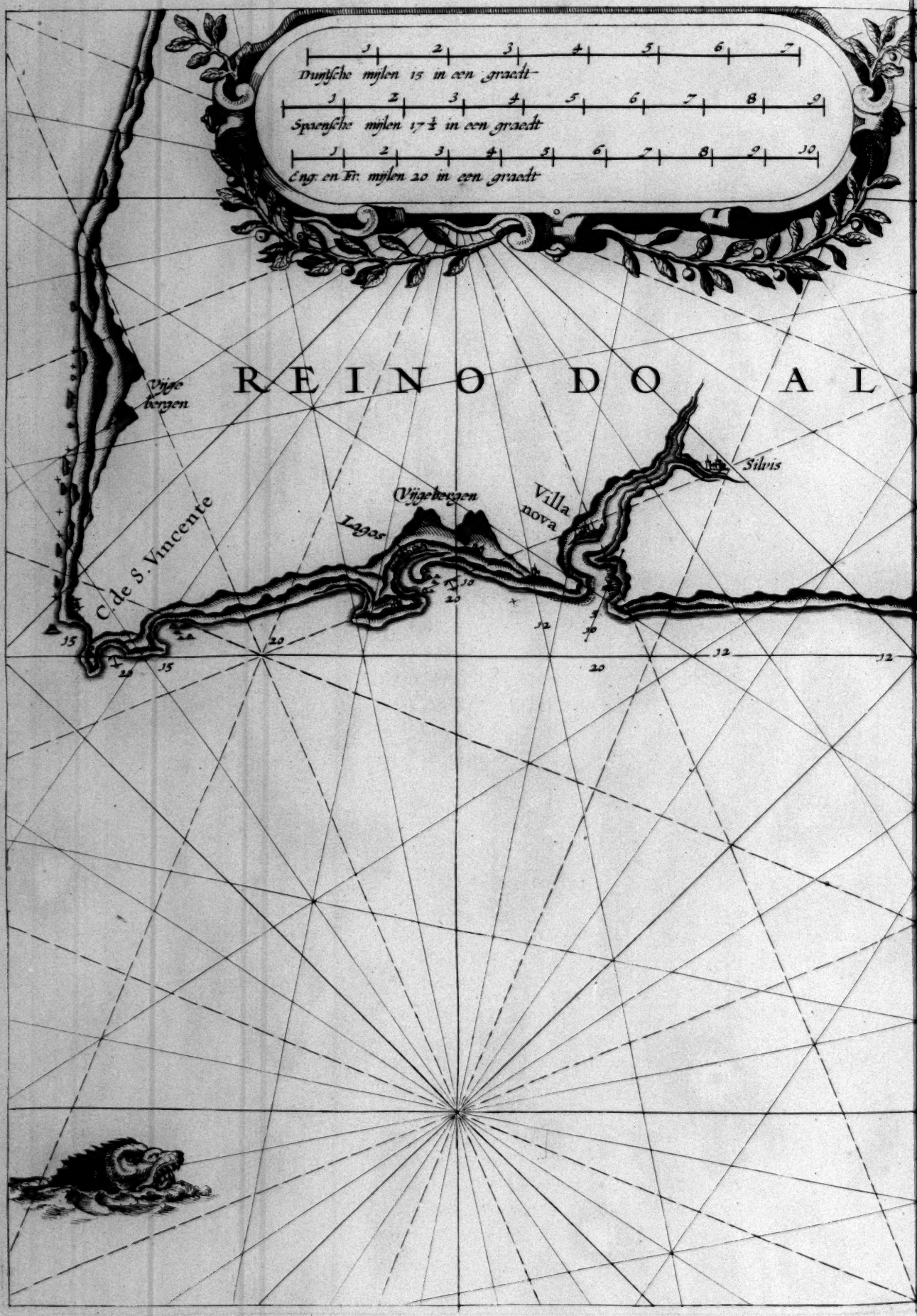
Villa Nova

Villa Nova lieth about foure leagues to the eastwards of Lagos; betwixt both, 3 leagues from Lagos, and one from Villa Nova, lyeth a sunken rock, whereof men must take heed. Villa Nova is a good haven, it lyeth in north, and north and by west, at halfe flood you shall haue there two fathom water; within in the haven on the east side lyeth a litle Iland or rock, and upon it standeth a tower or litle house, also there stands upon the land a great mast with a barrell upon the top of it: when the litle tower, or litle house, and the mast come one in the other, then you must sayle right in with them into the haven, alongst by the eastland untill you be past the litle tower,

the

an-
ape
cent.

Nova


1 2 3 4 5 6 7
Duytsche mijlen 15 in een graedt
1 2 3 4 5 6 7 8 9
Spaensche mijlen 17½ in een graedt
1 2 3 4 5 6 7 8 9 10
Eng: en Fr: mijlen 20 in een graedt
REINO DO AL
Vijge bergen
C. de S. Vincente
Lagos
Vijgebergen
Villa nova
Silvis
15
20
32

De Custen van Algarve tusschen de C. S. Vincente en Aimonte

L G A R V E

Porto S. Maria

Castromarin

Tavila

Aimonte

Faraon

C. de S. Maria

100

the weſt ſide is flat and ſhowld, when that you come by the maſt, then you muſt goe up to the weſtwardes before the towne of Villa nova, there you may anckor in foure or fiue fathom.

Faro. From Villa Nova to Faro, or Cape de S. Maria, it is about 9 leagues. Vpon the ſtrand ſtandeth a fire-tower, and from the poynt ſhooteth off a riffe which men muſt avoyd; into the haven of Faro men muſt goe in from the eaſtwards, it lyeth weſt, and weſtnorthweſt in, and they muſt leaue the tower on the larboord ſide, and run in in two or three fathom; being within, they may anckor over againſt the towne of Faro under the Iland in three fathom, it is upon the barre at halfe flood two fathom deepe.

The Cape S Maries ſheweth it ſelfe at ſea (when you firſt ſee it) in one round hommock, which is a good mark for to know the whole coaſt of the Condado by.

Fiue leagues northeaſt and by eaſt from C. S. Maria or Faro lyeth Tavila, that is a crooked ſhowld barre, which almoſt every yeare doth ſhift, and is not to truſt to for to ſaile into it, unleſſe it were firſt beakond, or ſet with buyes, it is at halfe flood ſcarce two fathom deepe, men lye there a little within the ſandhils in foure fathom.

From Tavila to Ayemonte the courſe is eaſtnortheaſt fiue leagues.

Ayemonte is a deepe Barre, and one of the beſt havens in the whole Condaet, it lyeth in northweſt by the eaſtland, at halfe flood it is three fathom deepe, there lye ſome ſhowlds before the haven, the markes thereof are theſe: There ſtandeth a tree upon the eaſt ſide of the haven or rivers mouth, when Ayemõte commeth right againſt over the tree, then are you to the eaſtwards of the ſhowlds or ſands, which lye before the haven, then you muſt go towards the foot ſtrand, and leade it in alongſt by it northweſt, and northweſt and by weſt; when you are within, you muſt goe up to the northwards before the town, or if you will go before Porte Maria, the northweſt courſe will bring you there; within, it is wide and broad, and ſixe or ſeven fathom deepe.

There goeth in alſo a haven by the weſtland, where men come in, right out of the ſea, but that by the eaſtland is beſt.

Of the tydes.

A Northeaſt and ſouthweſt Moone maketh high water at the C. S. Vincent, and at the Cape S. Maria, alſo on the coaſts lying betwixt them both

But to the eaſtwardes on the Condaet maketh full ſea a ſouthweſt and by ſouth, & ſouthſouthweſt moone.

How theſe lands doe lye one from the other, and from other lands.

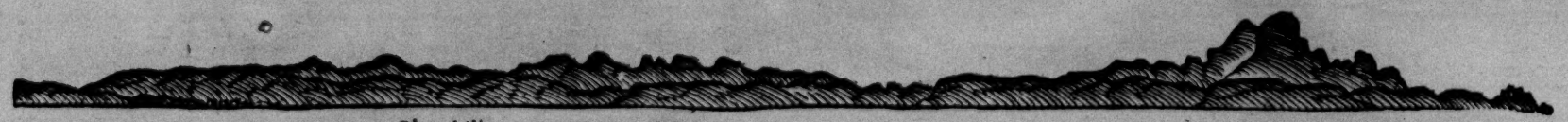
FRom the Cape S. Vincent to Lagos, or Laves eaſt and by north 7 leagues.
From Lagos to Villa Nova eaſt 4 leagues.
From Villa Nova to Cape Maria, or Faro, eaſt and by ſouth 9 leagues.
From Cape S. Maries, or Faro, to Tavila, northeaſt and by eaſt 5 leagues.
From Tavila to Ayemonte e.n.e. 5 leagues.
From C. S. Vincent to C. S. Maria eaſt 19 leag.
From Cape S. Maries to Leepe, or S. Michieels eaſtnortheaſt 17 leagues.
From Cape S. Maries to Saltees eaſtnortheaſt
— — — 24 leagues.

From Cape S. Vincent to the C. Cantin ſouth
— — — 87 leagues.
From C. Vincent to Cape de Geer ſouth weſterly at leaſt 133 leagues.
From C. S. Vincent to the Iland Lanzerotte ſouthſouthweſt 165 leagues.
From Cape S. Vincent to the great Canaries, ſouthweſt and by ſouth 210 leagues.
From Cape S. Vincent to the Ile de Palma ſouthweſt 224 leagues.
From Cape S. Vincent to Porto Santo ſouthweſt and by weſt 139 leagues.
And to Madera ſouthweſt and by weſt 157 leagues.
From C. S. Vincent to the Ile de S. Maria weſt
— — 245 leagues.
From C. S. Maria to Sibiona eaſt 29 leagues.
From Cape S. Maria to the Straite e.ſ.e. and ſoutheaſt and by eaſt 45 leagues
From C. S. Maria to C. Cantin ſouth and by weſt. 90 leagues.
From C. S. Maria to the great Canaries ſouthweſt and ſouthweſt & by ſouth 220 leagues.
From Cape S. Maria, or Faro, to the Ile de Madera ſouthweſt and by weſt 93 leagues.

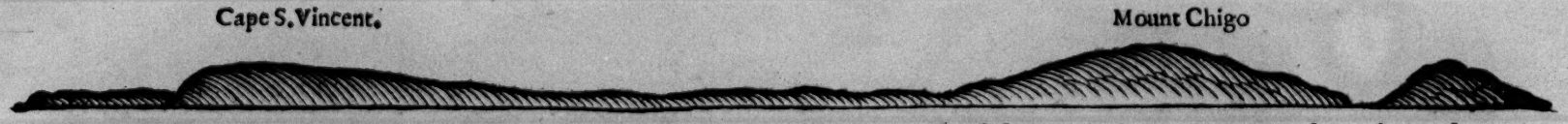
Heights.

THe Cape de Saint Vincent and S. Maria lye in — — 37 degrees.

Howe theſe lands do ſhewe themſelues at ſea.



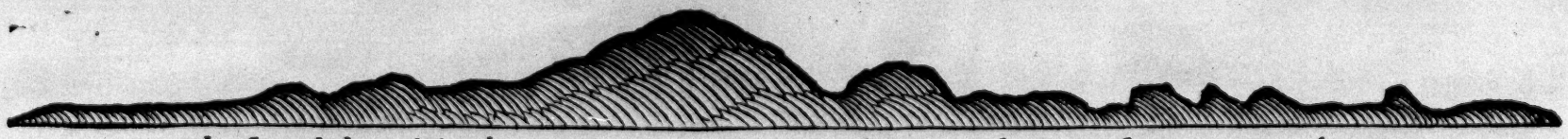
Thus ſheweth the land about the C. de S. Vincent, when you come from the northwards, and ſaile alongſt by it.



The Cape de S. Vincent ſheweth thus, when it is north and by eaſt, and northnortheaſt from you about 8 leagues. The Vighebergh or Mount Chigo lyeth then northeaſt and by north from you, in forme as is here portrayed.

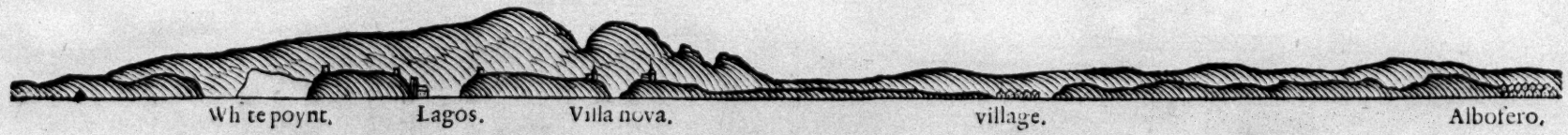
When the Vigheberghen or Mount Chigo is northnortheaſt and northeaſt and by north from you 12 or 13 leagues it ſheweth thus in one long hill going downe flat at both ends, with another peece of land much lower to the eaſtwardes of it.

Thus ſheweth the Cape S. Vincent, when it lyeth northweſt 7 leagues from you.



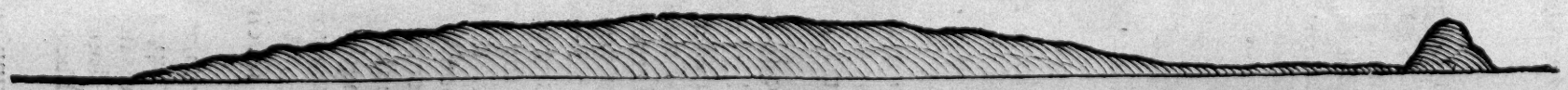
Thus ſheweth the Vighebergh, or Mount Chigo, when it is with cleare weather n.n.w. from you 11 or 12 leagues.

Thus

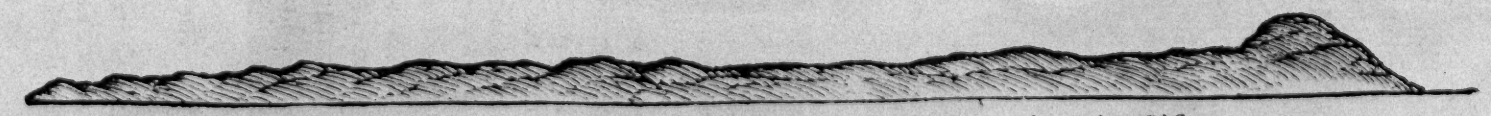


Thus ſheweth it ſelfe the land about Lagos and Villa nova, when you are thwart from Villa nova, not farre from land, a litle to the weſtwards of Lagos, lyeth a white poynt, whereby men may eaſily know Lagos. The Cape S. Maria ſheweth it ſelfe then, as in the figure following.

This followeth the former figure from Albofero to the Cape S. Maria.



Thus ſheweth the Cape S. Maria when it is northeaſt and by eaſt from you nine or ten leagues.



When the Cape S. Maria is northeaſt and by north from you, ſheweth it ſelfe thus.

CHAP. VII.

The coast of Andalusia from Ayemonte to the Strait of Gibraltar.

Leepe.

FROM Ayemonte to Leepe, or S. Michiels, the course is east and by north seven leagues. Leepe hath uncertain bars which oftentimes shift, where men may not trust themselues to saile into without a Pilot, the Barre that goeth into the eastwardes of the great Iland, is held to be the best, from thence they must go up to the westwardes towards Taron, and the River, and so come to Leepe, and there they take their lading in before the deepe.

S. Michiels

The Barre of S. Michiels was wont to run thwart over into sea, and to be at halfe flood three fathom deepe, and before S. Michiels fiue fathom: from thence men may come through within over the showlds at high water into the River at Leepe. Also men were wont to come in by Taron; but for certainty it is needfull to take in a Pilot for these Barres.

Taron.

Palos.

From S. Michiels to Palos, or Saltees, the course is east, and east and by south 7 leagues, here men saile into the great Condaet, this haven goeth in at the west end of the Rooduyn, there standeth a great broad tree to the westwards of that white cliffe, that you must keepe over a red sand-hill, like as if it were red earth: this sand-hill goeth sloping downe: Runne in upon these markes unto the strand, about north and north and by west, then shal the tower Odier which stands aboue Wolues, come over the east side of the havens mouth, keepe them so standing, and saile alongst by the strand, within two cables lengths untill you come about the poynt, and then you run up north to Palos, or northwest to Wolues, and anckor there in sixe or seven fathom.

Saltees.

Wolues.

It is deepe there within, sixe, seven, and also three and foure fathom in sailing up, according as men doe saile farre up, or els not, this Barre is upon the showldest at halfflood three fathom and a halfe, but within it is fiue fathom deepe.

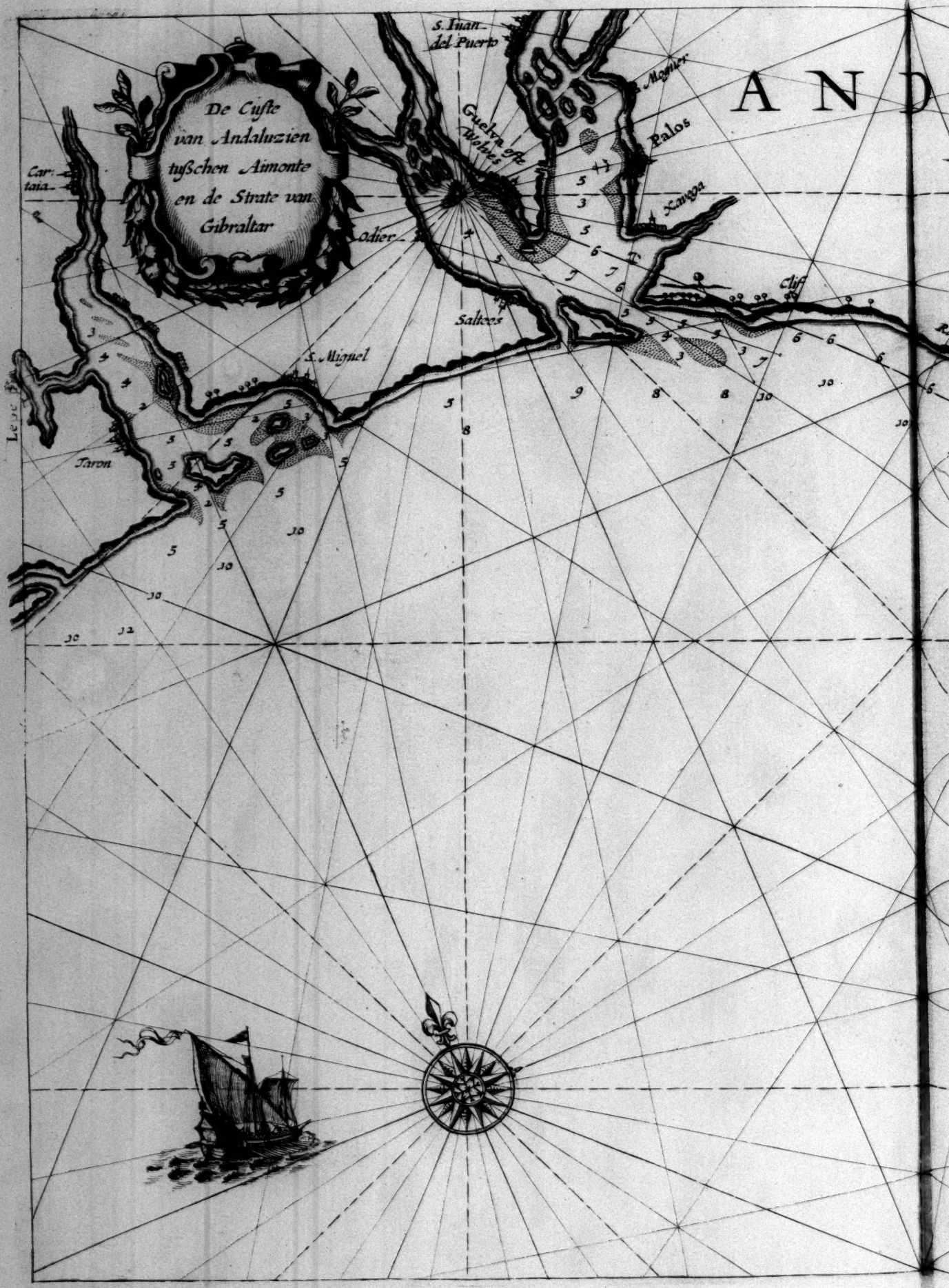
There cometh also a channell running out of the sea betwixt the sands, then Wolues cometh to the east side of the havens mouth, and men saile n.n.w. in; when they are within the havens mouth, then they must doe as before is sayd. This channell is three fathom deepe.

For knowledge of the land hereabouts, you shall understand that at the west end of the Roduyn, lyeth a white steepe land, clyffy, being reddish earth or chalke: hee that falleth therewith, may think that he is by the havens mouth of Saltees, upon it stand some little woods of trees, els the land is al without trees, reddish sand, and therefore called Rooduyn, or Red sand-hill.

From Saltees to the river of S. Lucas, the course is southeast and southeast and by east betwixt 8 and 9 leagues.

For to saile into the River of S. Lucas.

If you will saile into the river of S. Lucas, then saile alongst by the red sand-hils, so long untill that you get the Towne of S. Lucas in sight about e.s.e. from you, there lieth a white Cloyster to the eastwards of the town, against the high land, and there standeth a great tree upon the high land, bring the tree even to the north side of the cloyster, so that you may almost see through betwixt them, but not over the cloyster, keepe them so standing, and saile right in with them, and so you shall not come too neere the rocks to take hurt of them, and you shal haue upon the showldest at low water and neepe tydes, 3 fathom, and at high water 22 foot, or scarce 4 fathom. When the Castle of Chipiona and the Church beginne to come one in the other, then you come to the first rocks or should, when the Church and Castle are right one over the other, then they stand south southwest from you, then you are vpon the shouldest of all, but when the castle with the church come againe one through the other, then you get againe deeper water, 3 fathom and a halfe, and 4 fathom at low water with a neepe tyde, saile in alongst upon the foresaid markes of the Cloyster and the tree, but take good heed that you bring not the tree over the the Quire, at the south end of the Cloyster, for you should then come very close to the rockes, rather bring the tree a litle to the northwards of the cloyster, for you can not lightlytake hurt of the red sand-hils, but you may borrow of them upon your lead in 3 and 4 fathom. There stands also a mill to the eastwards of the towne, take heed that you bring not that also over the round cloyster that standeth a litle to the eastward beneath at the towne, but keep them a handspikes length asunder, and then you saile in the best deepe. But if the foresaid mil, and that round cloyster come one in the other when you saile in, then you shall (without faile) come upon the rocks or showld. When you are within over the showldest, saile then towards the strand of S. Lucas, untill that you see altogether open into the river, for to avoid the riffe that shooteth


De Cuſte
van Andaluzien
tuſschen Aimonte
en de Strate van
Gibraltar
S. Iuan
del Puerto
Huelva
Palos
Xarega
Saltees
S. Mignel
Taron
Carr:
taia
Lepe
AND

D A

Rio de Guadalquivir

Sivilien

Horcado

van

Rivier

Southwat

Redduijn

Cijfael

L V Z I A

Xeres

S. Lucar de Barrameda

Puerto S. Maria

Sibiona

Roita

S. Catrijn Cijfel

Diamant

Los Puercos

Puerto Real

Puntal

Cales

Punta d. S. Sebastiano

Southandt

Colommen van Hercules

Isola de Cadiz

Punte d. Suaco

I. de S. Pedro

Conil

C. de Trafalgar

De Straete van Gibraltar

Duijtsche mijlen 15 in een graedt

Spaensche mijlen 17½ in een graedt

Eng: en Fr: mijle 20 in een graedt

teth off from the n.w. point of the river, saile on alongst by the shore, and ankor before the litle church with the crosses (which stands below in the sand-hils) in 5,6, or 10 or 12 fathom, so neere as you please. Men may also turn out at this same channell with indifferent ships or barks, but they must take good heed, it is not there very broad.

For to saile in alongst by Sipiona

There goeth in also a chanel by the land of Sipionen or Chipiona; for to find it, you shall saile in within two cables lengths neer by the foresayd land, untill that you be within the second showld, then you must edge somwhat off from the land, untill you come upon the foresayd marks of the cloyster, and the great tree, then you must run in alongst upon them, as is before taught. The river of S. Lucas is good for to know, by the Rooduyn, or red sand-hill which lyeth to the westwards of it.

Cales.

From Sipionen to Cales Mals the course is s.e. 9 leagues. Cales is knowne by the mountaine of Granado, when that is e.n e. and east and by north from you, saile then right in with it, and you shall not faile to fall right before Cales. At the point of Sipiona lye many rocks aboue water, & betwixt the point of Sipiona and Cales. Foure leagues from Sipiona lyeth Rotta, there shooteth off a great ledge of rocks from the poynt.

For to saile into the bay of Cales. Los Puercos.

He that wil go into the bay of Cales, let him run in right with the rockes which lye on the west side of the Bay, being called *Los Puercos*, and within two cables lengths in alongst by them in 6 or 7 fathom, untill he come before the town of Cales, and ankor there so deep as he pleaseth, in 8, 10, 12, or 15 fathom, the fareway lyeth in most eastsoutheast and southeast and by east.

Diamant.

There lyeth a rock under water called the Diamant, about n.n. e. and n.e. and by north from the Puercos, a great half league. When S. Katharins chappel upō the northland is e.n.e. from you, then are you thwart of that rocke, there is at halfe flood 3 fathom water upon it,

Markes of the Diamant.

the marks of this rock are these: When Mary church cometh over the north end of Cales, (that is a Cloyster which standeth without Cales) there stands also a house upon the hill, where men goe alongst by, when they goe to Sheres, whē that house cometh over the chappel which standeth upon the water side, to the westwards of Marie port: when these markes come together one in the other, then you should saile upon the foresaid rock, there is upon the showldest of it at high water, 3 fathom and a halfe water upon it. But set the two high hills which are to the southwards of the way of Sheres, that they be a litle a sunder, and that they doe not come one in the other, then you cannot sail upon this rock. The Puercos rocks lye from the north point of Cales about halfe a league. He that lies before Cales in the road, hath Puntall south from him, or thereabouts, according as he lyeth neer to Cales. But to the southwards of Cales lieth a rock, come not neerer that then in seven fathom.

The Bay of Cales is wyde & broad, men lye there in 5 & 6 fathom, the n.w. wind cometh there open in. If any man therefore would go further in behind Puntal, let him goe in southeast betwixt the point of Port reall & Puntall, and run up about the poynt of Puntall, there men lye land-lockt for all windes: there men may lay their ships dry aground for to make clean. He that will goe into the Crieke, must take a Pilot, and run up into the water of Port real, leaving the litle Iland on the larbord side, and then Herods Creek shall open it selfe, and there he must saile up, keeping the middle of the chanel, till he come before the Saltheaps.

To sayle from Cales to the Strait.

For to sail from Cales to the Strait, men must go away south, & south & by east to the C. de Trafalgar, and then they shall run far enough without the banke or rocks which lye off s. e. from Cales. From the poynt of S. Sebastian to C. de Trafalgar, which is the north point of the Strait on the west side, it is s.s.e. ten leagues. About two leagues to the northwards of the cape, lieth Conil, there is a faire sandbay where men may ankor in 12, 13, and 14 fathom clean ground.

Of the tydes and course of the streames.

BEfore the Condaet on the coasts a s.s.w. and n.n.e. moon maketh high water.

Before Palos Moguer and Wolues maketh full sea a south and north Moone.

Before the river of S. Lucas, and at Cales before the bay maketh full sea a southwest & by south, and northeast and by north moon.

At Cales in the Bay maketh high water a s.s.w. moone.

The ebb falleth without the Puercos to the southwards towards the Strait, and the flood towards the land to the northwards: but for the most part, the flood falleth thwart into the land, about the havens.

How these lands lye one from the other, and from other lands.

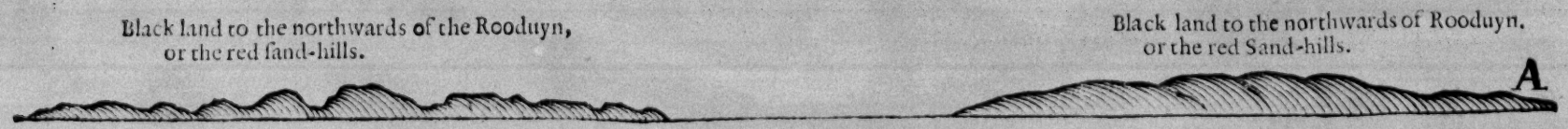
FRom Ayemonte to Leep east and by north	7 leagues.
From Leep to Saltees or Palos east and east & by south	7 leag.
From Saltees to the river of S. Lucas, or Sipiona southeast and southeast and by east	8 or 9 leagues.
From S. Lucas or the poynt of Sipiona, to the poynt of Cales, the course is southeast	9 leagues.
From Cales to the poynt of the Strait southsoutheast	10 leagues.
From Cales to the great Canaries southwest.	240 leagues.
From Cales to the Ile de Madera westsouthwest	200 leagues.

Heights of these lands.

THe coast of the Condaet lyeth in 37 degrees, and 15 or 20 min.
The Iland Cales in 36 degrees 30 minutes.

Hovv theſe lands do ſhevv themſelues at ſea.

The land betwixt Wolues and the River of S. Lucas, ſheweth it ſelfe when you ſaile alongſt by it, like as is portrayed in theſe three figures following.



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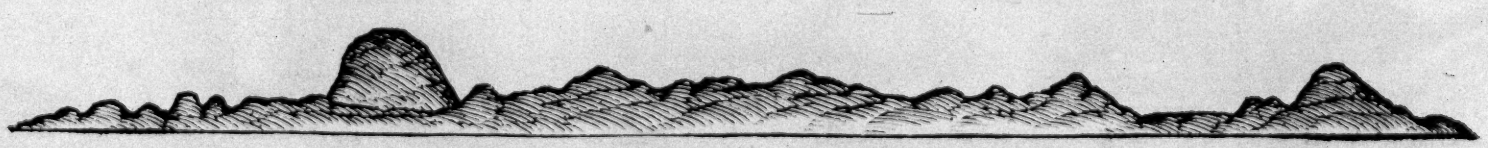
This followeth to the two former figures, the B B *one to the other.*



When you ſaile towards Cales, and the mountaine of Granado commeth to ſtand eaſt from you, then it ſheweth it ſelfe in this forme.

The

Duytsche mijlen 15 in een graedt

Spaensche mijle 17 ½ in een graedt

Eng: en Fr: mijlen 20 in een graedt

Comil

C. Trafalgar

HISPA

Estepona

I. Dorija

Dorija

Swarte Clip

C. Kabrita

Ballast plaets

Gibraltar

Gibraltar

C. Spartel

Tanger

Out Casteel

C. Malabata

Alcasar Segeer

Schermickel bergh

Seuta

Seuta

Castellejo

BARBA

C. Blanco d'Arzi
al: C. porgues

Toren

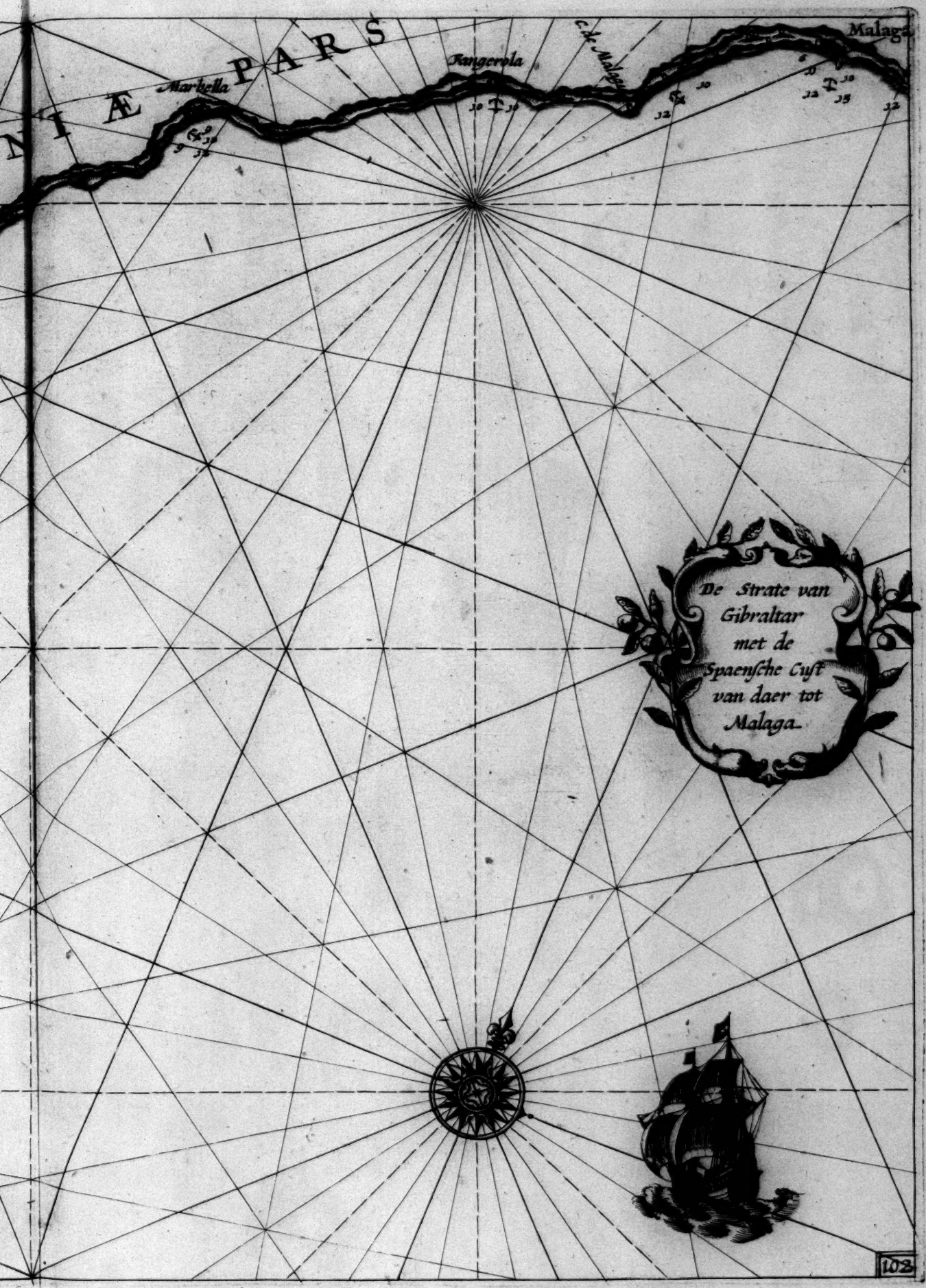
Wighes

RIÆ

Tetuan

PARS

C. Tetuan


Malaga
Rangerola
Marbella
PARS
De Strate van
Gibraltar
met de
Spaensche Cuyst
van daer tot
Malaga.
102

CHAP. VIII.

The Strait of Gibraltar, & the coaſt of Spaine from the Straite to Modrill.

HEE that deſireth to ſaile into the Straite of Gibraltar, comming from Cales, let him goe from the poynt of Saint Sebaſtian, which is the weſtermoſt poynt of the Iland Cales, ſouth and by eaſt, and ſouthſoutheaſt, towards the Cape de Trafalgar, untill he be a good wayes without the land for to avoid the Spaniſh coaſt which is fowle: there lyeth off weſt and by ſouth from the Iland Tariffe, a banck of ſtones two leagues, or two leagues and a halfe into ſea, whereupon is eight, nine, or ten foote water; when it bloweth hard, men may ſee it break. The foreſaid poynt of S. Sebaſtians, and the Cape de Trafalgar lye ten leagues aſunder.

Riffe of Tariffe.

When you are then ſomewhat without the Cape de Trafalgar, and ſet your courſe ſouthſoutheaſt, and ſoutheaſt and by ſouth, then you ſhall fall with the land of the Barbary coaſt, within the Cape de Spartell, about thwart of Tanger, lying in a great bight and Sand-bay. Vpon the weſt poynt of this bay of Tanger, ſtandeth a caſtle ſomewhat high, and yet ſomwhat higher upon the high land, ſtandeth a litle watch-tower: but to the eaſtwards of Tanger ſtandeth alſo an old ruinous watch-tower, whereby Tanger is very good to be knowne. From Tanger to Ape-hill, the coaſt lieth moſt eaſtnortheaſt, and eaſt and by north, that is the right courſe for to ſaile through the Strait. If you will ſaile into the Strait by night, then keepe you neereſt to the Barbary coaſt, which is very cleane, and there you can take no hurt: but the Spaniſh coaſt is fowle, as is beforeſaid. They that will ſaile alongſt by the Spaniſh coaſt, they muſt goe cloſe alongſt by the ſhore, and runne through betwixt the Iland Tariffe and the foreſayd fowle grounds, cloſe alongſt by the Iland, or els muſt keep farre off from the Iland, for to runne alongſt without the ſhowlds; but in the middeſt, neere alike unto both lands, it is beſt.

Tanger.

Three leagues to the eaſtwards of the Iland Tariffe, lyeth the poynt of Cabrita, being the weſt poynt of the great Bay of Gibraltar, ever againſt the hill of Gibraltar: a litle to the weſtwardes of it, is a good road for a northeaſt winde, in twelue, ten, and eight fathom, not farre from the ſhore, thwart of a great rock which lyeth cloſe upon the water ſide, a litle to the eaſtwards of the fire-tower: A little to the weſtwards of that fire-tower which ſtandeth upon the foreſayd poynt, is a faire ſandſtrand, betwixt the two towers there you ſhall lye ſmooth for the weſtern e grown ſea.

Cape de Cabrita.

At Gibraltar is a faire Bay almoſt like a haven: If you will ankor in the Bay of Gibraltar, then ſayle ſo farre into it, untill that the innermoſt poynt of the high hill of Gibraltar, doe ſtand eaſt from you, thereabouts it is deepe fiue or ſixe fathom, and cleane ground: towardes the mill it is ſhowlder water of three fathom. Men lye there in the Bay land-lockt for a weſt winde, a ſouth winde commeth from the poynt of Gibraltar hill, but a ſouthweſt winde that bloweth there open in. From thence are brought good wines.

When you will ſet ſaile from the road of Gibraltar with an eaſterly winde, it is good to beare up ſomewhat before the winde towards the weſt ſhore, and then forth out alongſt by the lee ſhore, for the eaſterly windes doe fall with ſuch whirling and fore-flaughes, from over the high land of Gibraltar, that you ſhall be hardly able to get out of the Bay alongſt by the high land. When you come from the eaſtwards, & will ſaile out through the Straits, and that you are ſomewhat neere to the Spaniſh coaſt, then you muſt be very carefull, for then you bring the hill of Gibraltar, againſt the high land of Barbary, and in regard the land to the northwardes of Cibraltar hill is low, it ſeemeth (to look to) to be nothing els, then as if there were the opening of the Straites. It hath heretofore happened, that ſome which haue ſo miſtaken it, haue ſailed into the bay, thinking it to be the opening of the Strait, and ſo haue loſt their ſhips there. Therfore it is very needful, that men take great care not to miſtake themſelues of the hill of Gibraltar, and if men doe take heed of it, it is good for to know.

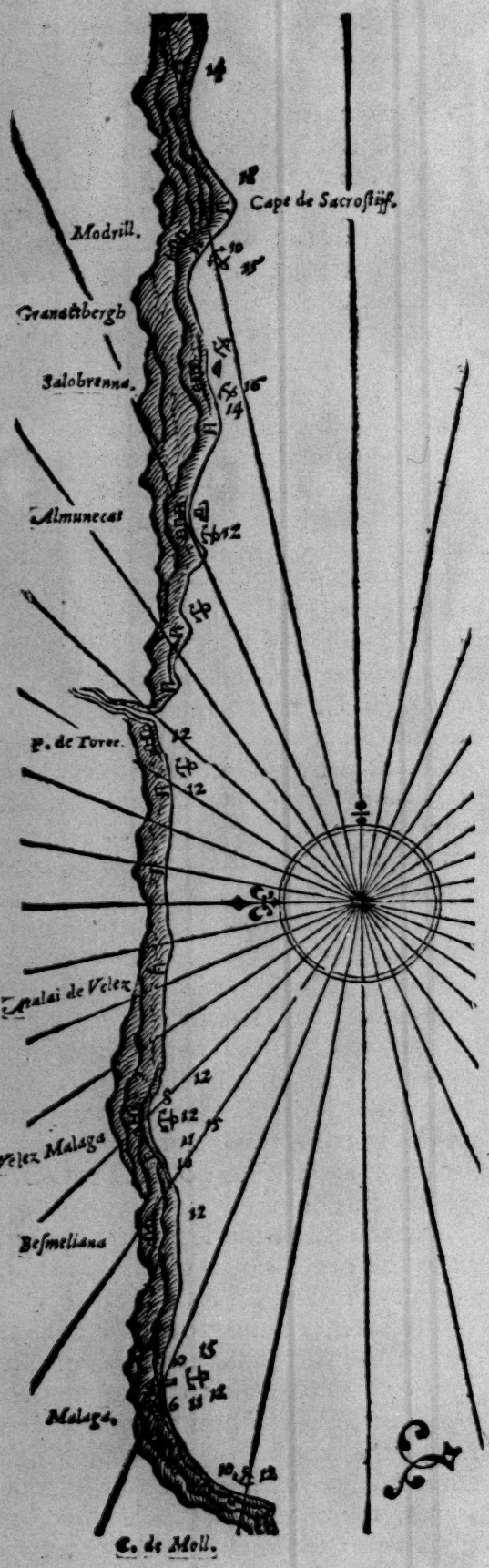
Bay of Gibraltar.

Eſtepona lieth fiue leagues to the eaſtwards or to the northwardes of Gibraltar, betwixt them both ſtand divers fire-towers upon the coaſt, there is cleane ground for to anckor. If you will anckor to the eaſtwards of Gibraltar, by the next fire tower to Gibraltar, then bring Gibraltar ſouthſouthweſt from you, and ankor in 25 fathom, there is clean ground, and black ſand: but if you will ankor by the ſecond fire-tower, there is a valley, and there you may fetch water, and anckor in 20, or 22 fathom, there is alſo cleane ground, and better lying for to ſet ſaile with eaſterly windes, for thoſe that are bound out of the Strait.

Eſtepona.

Before Eſtepona men may anckor in 14 fathom,

The Coast of Spaine from Malago to Modrill.



fathom, that is a place for to lade fruite and wines; fiue or fixe leagues to the eaſtwards of it lyeth Marveles, betwixt them both ſtand fiue watch towers upon the coaſt.

From Gibraltar to Marveles the courſe is northeaſt and by north diſtant 12 leagues. If you will anckor at Marveles, then you muſt look out for two Packhouſes which ſtand upon the ſtrand, and a great ſquare watch-tower cloſe to the eaſtwardes of the foreſayd Packhouſes: bring the gate of the towne ſo, that you may ſee through betwixt the Packhouſes and the watch-tower, and ankor there in nine or ten fathom. Right before Marveles, the ground is not cleane. About a ſhot of a Caſtpeece to the weſtwards of the town, men may fetch freſh water. Marveles.

From Marveles to Fangerola it is 5 leagues eaſtnortheaſt, betwixt them both ſtand alſo fiue watch-towers. Fangerola is a caſtle, and hath a faire ſand-bay, there is good anckor-ground in ſeven or eight fathom, a flat riſing ground, men may lye there land-lockt for a weſtſouthweſt wind. Fangerola.

From Fangerola to Cape de Moll, the weſt poynt of Mallaga, the courſe forth e. n. e. two great leagues: but from the weſt poynt o Mallaga to the town of Mallaga, the courſe is northeaſt, and northeaſt and by eaſt foure leagues, it is there betwixt them both a faire ſtrand, where men may anckor all alongſt in ten or twelue fathom. C. de Mol.

Mallaga is known by theſe markes: There ſtandeth a caſtle to the eaſtwardes upon the high land, and there come two walles downewards towards the ſea to another caſtle which lyeth by the water ſide. Before that ſame Caſtle is now the roade, that which was wont to be the right road, is now altogether ſpoiled by caſting of ballaſt. Mallaga.

If you will anckor in the road before Mallaga, then anckor in 10, 11, 12, 13, or 14 fathom, thwart off from the head, ſo that the head come to lye from you north and by eaſt, there is very good ground the anckors hold there well, alſo men lye there out of danger for the Moores. Road before Mallaga.

Velez Mallaga lyeth from Mallaga eaſt and by north diſtant 7 leagues, betwixt them both men may anckor all alongſt by the ſhore. About a league to the weſtwardes of Velez Mallaga ſtandeth a litle Caſtle; before it is good anckoring in ten or twelue fathom. By the next tower, to wit, the next to the little Caſtle, there is freſh water to be gotten on the land

The towne of Velez Mallaga lyeth about a league within the land; but upon the ſtrand Velez Mallaga.

ſtandeth

ſtandeth a great Packhouſe which to ſee to, is like a caſtle.

If you will anckor at Velez Mallaga coming from the weſtwards, then you muſt giue the weſt poynt a birth, there lieth off a banke a good wayes into ſea by the watchtower which ſtandeth below, to the weſtwardes of Velez Mallaga: but if you run alongſt by the ſhore in ten or eleven fathom, without comming neerer the ſhore, then you cannot take any hurt of the foreſayd banke or riffe. When as then the town of Velez Malaga cometh a litle to the eaſtwards of the foreſayd Packhouſe or tower which ſtandeth upon the ſtrand, then anckor in 12, 10, or 8 fathom, it is there all cleare and cleane ground.

From Velez Mallaga to Almunecar, the courſe is eaſt 15 or 16 leagues, betwixt them both it is all a cleane coaſt, men may anckor there under all the poynts which lye betwixt them both.

Two great leagues to the weſtwards of Almunecar lyeth a poynt, wherupon ſtandeth a fire-tower, under it is a good road for a weſt wind.

If you will anckor at Almunecar, then ankor to the weſtwards of the rocke, where the little chappell ſtandeth upon in 12 fathom, there is good ground, and ſhall lye there landlockt for an eaſt and weſtnorthweſt wind.

Salobrena lyeth from Almunecar 4 leagues to the eaſtwardes, that is a litle towne with a litle caſtle, and lyeth upon a hill a litle about the eaſt poynt of Almunecar, and right before Salobrenna lyeth a litle Iland, he that will ankor there muſt anckor to the weſtwards of it, there he ſhal lye landlockt for a n.e. wind, & alſo for a weſt wind, then he ſhal haue ſuccour of the eaſt point of Almunecar. Men may alſo well ankor to the eaſtwards of that litle Iland but to the weſtwardes of it is the beſt roade there lye alſo all the ſhips, they may anckor there in 14 and 15 fathom, clean ſoft ground; in 16 fathom they ſhall lye ſomwhat too farre out. Men may (if need ſo require) run through betwixt the foreſayd litle Iland, and the maine land, betwixt them both there is about ſixteen or ſeventeen foot water, and the litle Iland s round about clean, ſo that men may run very cloſe about by it without feare.

Two great leagues eaſtwards from Salebrenna in the ſame bight, a halfe league fron the ſea ſide within the land, lyeth Modril, which hath two Churches and ſome tree, thereabouts upon the water ſide ſtandetha ſquare tower.

If you will ankor at Modrill, then ankor before the foreſayd ſquare tower which ſtandeh upon the water ſide in 12 or 13 fathom, ſo that you may ſee the little tower upon the eaſt poynt even without the other poynt, there is cleane ground, men lye there landlockt for an eaſt winde, but a ſoutheaſt and a ſouth winde, make there (like as at all places on theſe coaſts) a lee ſhore. A litle to the eaſtwardes of Modrill, lyeth the poynt called Cape de Sacraſtyf.

The Coaſtes of Barbary.

FOR to ſaile out of the Bay of Gibraltar to Tetuan, then run over ſouth and by eaſt, about cloſe by the poynt of Seuta, eſpecially with a weſterly wind, you ſhould otherwiſe be carried away ſo with the current, which then commonly runs to the eaſtwardes, that you ſhould fall too farre to the Leewards. Comming then about by the poynt of Seuta, you ſhall ſee out a head a black poynt called Cape Porques, lying ſouth from the poynt of Seuta. When men lye in the Bay of Gibraltar, they may ſee the foreſayd C. Porques alongſt over Seuta, which is a poynt very good to be knowen, ſaile towards that poynt, and with a weſt wind luffe up ſo neere as you can. When you come about that poynt, then you ſhall begin to ſee Tetuan, which lyeth up againſt the high land, a great league within the land: run then ſo farre to the ſouthwards, untill that the eaſt end of the towne come right over a litle round hommock which is upon the high land within. In the middeſt of the towne ſtandeth a black tower, and in the innermoſt land of all within, lye three litle hills, which doe (as it were) looke over the outermoſt inner land, bring the three litle hills over the foreſayd black tower, and ankor then ſo farre from the ſhore, that the firſt litle hill of the high land to the ſouthwards of Seuta towards C. Porques, come a litle without C. Porques, there it ſhall be ſixteen fathom deep, and good ſoft ground. If you ankor otherwiſe then upon theſe foreſayd markes, you ſhall haue bad, ſtony, and ſharpe ground. It hath happened that ſome ſhips haue ankored there, but their anckors fell ſo into the rockes, that they could not weigh them againe, but muſt hew off their cables, and leaue their anckors behinde them. Therefore if you come off from the poynt of C. Porques, then be carefull that you bring the foreſayd firſt litle hommock (which lyeth a ſtearne of you in the bight of Seuta to the ſouthwards of Seuta) a litle without the C. Porques, and ſo keep ſayling to the ſouthwards, & keepe heaving of the lead continually without ceaſing, vntill that you get the ſoft ground, ſo ſoone as you ſhall feele it, let then preſently

C. Porques

Markes of the roade before Tetuan.

your anckor fall, for the place where the ſoft ground is, is not two cables lengths in compaſſe great.

C. Tetuan. Tetuan lyeth from Seuta about ſixe leagues, and three or four leagues to the ſouthwards of it lyeth a poynt called C. Tetuan, whereupon ſtandeth a tower. He that hath never been at Tetuan, might eaſily be miſtaken by that point taking it to be C. de Porques, the ſooner becauſe that ſome ſay that Tetuan lyeth at leaſt nine leagues to the ſouthwards of Seuta. It hath happened that ſhippes haue ſayled unto this poynt, and haue ſo runne paſt Tetuan, therefore it is beſt that men goe not too farre from the ſhore either by night or by day for to get the C. Porques certainly in ſight.

The Bay of Tetuan betwixt the C. Porques, and C. Tetuan, is a ſand bay altogether of ſand ſtrand with low hommocks here and there upon the ſea ſide, which a farre off ſeeme as if they were ſhippes, but the ground thereabouts is altogether fowle, except ſuch a place as before is ſayd. Betwixt the C. Porques and Seuta it is alſo a faire ſand ſtrand, but thwart of it is all good ground.

Of the tydes.

IN the narrow of the Strait maketh high water a ſouthweſt and by ſouth moone. The current runneth more to the weſtwards then to the eaſtwards; when it is faire weather there goeth commonly foure houres flood to the eaſtwards, and 8 hours ebb to the weſtwards; but the moſt part of the time according as the winde is, and at ſome times the current runneth ſo ſtrong, that it rippleth as if there were ſhowlds.

Courſes and Diſtances.

FRom C. Trafalgar to Tariffe the courſe is ſoutheaſt 4 leagues.

From Tariffe to the poynt of Gibraltar eaſt & by north 5 leagues.

From the poynt of Gibraltar to Marveles northeaſt and by north 12 leagues.

From Marveles to Fangerola eaſtnortheaſt 5 leagues.

From Fangerola to the weſt poynt of Mallaga eaſtnortheaſt 2 leagues.

From the weſt poynt of Mallaga to the towne of Mallaga northeaſt and northeaſt and by north 4 leagues.

From the point of Gibraltar to Malaga northeaſt 23 or 24 leagues.

From Malaga to Velez Malaga eaſt and eaſt by north 7 leagues.

From Velez Mallaga to Almunecar eaſt 15 or 16 leagues.

From Almunecar to Salobrena eaſt 4 leagues.

From Salobrena to Modril eaſt & by north 2 leagues

From Modril to C. de Sacraſtyf eaſtſoutheaſt 1 league.

From C. de Sacraſtyf to Caſtell de Fierro eaſt and by north 4 leagues.

From Caſtell de Fierro to Adera eaſt 8 leag.

From Adera to Almeria northeaſt 5 leagues.

From Almeria to Cape de Gat ſoutheaſt and by eaſt 5 or 6 leagues.

From the poynt of Gibraltar to C. de Gat eaſt and by north 66 leagues.

From the Cape de Spartell in Barbary to the poynt of Ape-hill, the courſe is eaſtnortheaſt 8 leagues.

From Ape-hill to the point of Seuta ſoutheaſt and by eaſt 2 leagues.

From the point of Seuta to the road of Tetuan ſouth 5 or 6 leagues.

Heights.

THe middeſt of the Strait of Gibraltar lyeth in 35 degrees and 50 minutes.

To the Bok-binder.

Place the Cardes thus.

	before fol.		before fol.
Numb. 94 and 95	137	Numb. 99	157
96	143	100	161
97	149	101	165
98	155	102	167

The third parts

SIXTH BOOKE

of the

SEA-MIRROVR

of the Weſterne and Southerne

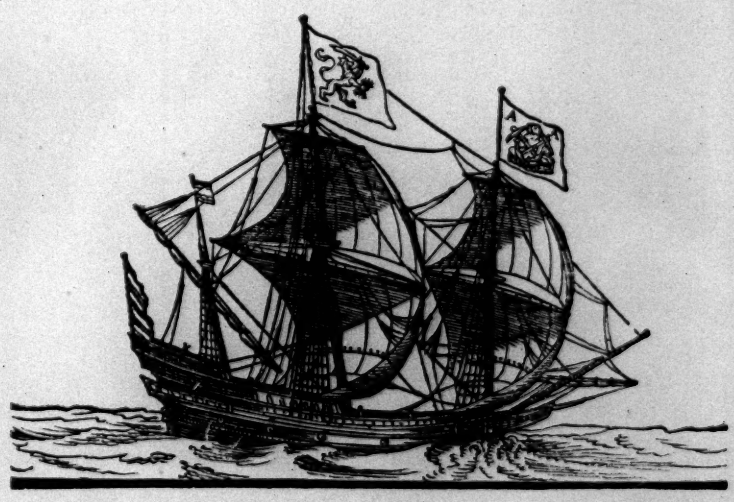
NAVIGATION.

Containing

THE DESCRIPTION OF THE Coaſtes of Barbarie,

From the Straight of Gibraltar unto the Cape de Geer.

Together vvith the deſcription of the Canaries and Azores Ilands.



With priviledge of the H. M. Lords the States Generall of the Vnited Provinces for ten yeares. 1625.

Cuervo

I. de la Flores

Graciosa

I. S. Georgij

Tercera

Fayal

I. del Pico

Abrolo

S. Michiel

Formigas

S. Maria

I. Madera

Palma

Gomera

Ferro

41
40
39
38
37
36
35
34
33
32
31
30
29
28
27
26

Met Pruilegie der Ed. H. M.
Heeren Staten generael
voor thien jaren

Port a Port

PORTVGAL.

Aveiro

C. Montego

Figuera

Barlenges

C. de Espitron

C. Roxent

Lisbona

C. de Spichel

Setubal

S. Vves

ALGARVE.

Salmes

C. S. Vincente

Aimonte

Sivilla

Calis

Straite van Gibraltar

C. Spartel

Azamor

Masagam

C. Cantin

Saffia

L. Mogodor

C. de Sem

C. de Tasfillano

C. de Geer

Meca

C. Gilon

Alcanger

C. de Gerr

Darades flu.

Arguin

Porto Santo

Madera

Serters

Salvages

I. Tenerifa

Alegranca

Lancerota

Forteventura

Canaria

C. Bajador

BARBARIA

Pascaarte Van Barbarische cust mitsgaders van de Canarische en Vlaemsche Eylanden

Duytsche mijlē 15 in een gr.

Spaens: mijlē 17½ in een gra:

Eng: en Fr. mijl: 20 in een gra:

103

ount Castiee l

Tanger

C: Spartel

Hemelken

Arzila

wit clif

Hage boom

Duytsche mijle 15 in een graedt

Spaensche mijle 17 ½ in een gra:

Engelsche mijlen 20 in een gra:

Hagen toren

Sallée

Toren

Hemelken

De Schuer een bos boomen

Monsor

Asamor

Rivier

Lijones

Larache

Out Mamora

Mamora

L. Fedale

Anfe zyde Angle een Verwalle Stadt

Cloof

steyle Clif

28

30

26

Lijones

Deſe drie
ſtucken vertoonen
de Barbariſche Cuſt van
de Stnet tot de C. Cantin

Duijſch. mijlen 15 in een graedt

Spaenſche mijle 17½ in een graedt

Eng: en Fr: mijle 20 in een graedt

Malagam

Steenrijf

Tijte Vervallen Stadt

Steilen Hoeck C. Blanco Roocleven

Caſa Cavalgero

Cloof als bij Fedale

C. Cantin

9

6

Duijſche mijlen 15 in een graedt

Spaenſche mijlen 17½ in een graedt

Eng: en Fr: mijle 20 in een graedt

THE SIXTH BOOKE of the VVESTERNE NAVIGATION.

Containing the Deſcription of the Coaſtes of Barbarie from the Straite of Gibraltar untill paſt the Cape de Geer: together with the Canaries and Azores Ilands.

CHAP. I.

The Coaſt of Barbarie from the Straite to Cape Cantin.

THE Coaſt of Barbarie in the Straite of Gibraltar, lyeth from Seuta to Cape de Spartell, weſt and by ſouth, and weſtſouthweſt eight or nine leagues. But the Cape de Spartell and Cape de Trafalgar on the Spaniſh ſide, lye north and by weſt, and ſouth and by eaſt eight leagues aſunder.

Arzila. From Cape de Spartell to Arzila, the coaſt lyeth ſouth & by weſt ſeven leagues: betwixt them both alongſt the ſea ſide, it is all lowe land, with ſome poynts and high land within, with a white ſand-hilly ſtrand. A little to the ſouthwards of the poynt of C. de Spartell, men may anckor for eaſterly windes in twelue or thirteen fathom, cleane ſand-ground, but ſo ſoone as the winde doth ſhift to the weſt, they muſt be ready to get under ſaile, leſt they bee inbayd upon a lee ſhore.

About a league to the ſouthwardes of the Cape, lyeth a little hommocke upon the low land, by the water ſide, which ſheweth (in ſayling by) like a broken ſchonce or caſtle.

Arzyla is a litle walled town lying upon the water ſide, and hath a little bard haven, which men doe ſayle into at two places, through a row of rockes, which lyeth before it, the northermoſt channell is the deepeſt, but both of them are not fit but for ſmall ſhippes. Being come within the rocks, men do ankor betwixt the towne and the rockes.

From Arzyla to Alarache the coaſt lyeth alſo ſouth and by weſt eight leagues, it is altogether a cleane coaſt with ſome rocks on the ſhore, the land betwixt them both is ſomwhat higher then betwixt Arzila & the Cape, with high land within. About an Engliſh mile to the ſouthwardes of Arzila ſtandeth a tower; and ſomwhat further to the ſouthwards, upon the high land, ſtand ſome litle houſes, but men cannot well ſee them, except they ſaile very cloſe alongſt by the coaſt. Betwixt Arzila and Alarache, but ſomwhat neerer Alarache then Arzila, lyeth on the ſea ſide, a high white cliffe which is very good to be known; betwixt that cliffe & Alarache ſtandeth upon the high land a very high tree, with ſome other trees by it, when men come from the northwardes alongſt by the ſhore, that great tree ſeemeth to be a tower, yet ſomwhat to the ſouthwards ſtandeth an other great tree, but not ſo great as the other: when men begin to come neere to Alarache, or els by the ſouthermoſt great tree, then the foreſayd greateſt tree doth hide it ſelfe behinde the land. Theſe are all very good marks for to know this coaſt by, betwixt theſe two places.

Allarache lyeth with a great Caſtle upon the ſouth poynt of a river, which is very ſhowld and crooked, the north poynt is a low poynt going flat off, & within it, on the north ſide of the river ſtandeth alſo ſome buildings. Before the river lyeth a barre of quickſand, which lyeth off from the north poynt, where the ſhips may go in over with a ſpring tyde, through a Criek, els it is but for Barkes and Friggats: Men may anckor before it in the Roade in ſixteen, ſeventeen, and eighteen fathom. Alarache

Alarache is under the command of the king of Spaine, and is litle or nothing uſed either by Engliſhmen or Dutchmen.

He that ſayleth alongſt this coaſt, muſt not

come very cloſe to the ſhore, 'unleſſe it were with a hard Levant, or eaſterly winde, with calme weather there goeth ſometimes a very great grown ſea out of the weſt or northweſt, ſo that ſometimes men can hardly get off from the ſhore.

Old Mamora. From Alarache to Old Mamora the coaſt lyeth ſouth and by weſt, and ſouthſouthweſt betwixt 7 & 8 leagues, it is low land with ſand-hills with few places that are good to be knowen, all alongſt even to Mamora.

He that cometh out of the ſea, and falleth with the land here on this coaſt, ſhall perceiue litle knowledge of the land, unleſſe hee fall with ſome of the inhabited places, This Old Mamora was wont alſo to be a haven, but is now altogether caſt to of the ſea.

Mamora. From Old Mamora to Mamora the coaſt lyeth alongſt ſouth & by weſt, and ſouthſouthweſt ſeven leagues. Before Mamora is a high broad ſand-ſtrand, and is not good to know, when you are ſomewhat off the land. The beſt knowledge thereof is this, When you come from the northwardes alongſt the ſhore, you haue all high land within, that you ſhall leeſe when you come before Mamora; and when you come from the northwards, you cannot ſee the river of Mamora open before you bee paſt it, by reaſon that it lyeth in to the eaſtwards, and the north poynt is low. When you come ſomewhat cloſe by the ſhore, you ſhall ſee upon the high land in the Caſtle of Mamomora (which the Spaniards haue built there for their defence of the place) a very high maſt or ſtake, which you may ſee indifferent far off, and when it is cleare weather you may ſee alſo the high thick tower of Sallee to the ſouthwards ſtand againſt the land. Before the River lyeth a Barre which with a Spring hath ſixteene and ſeventeen foote, and ſometimes more water; the Barre is oftentimes altered by the ſea. In the Spring it lyeth in commonly eaſtſoutheaſt, and thereabouts. In the later part of the yeare it lyeth in more eaſterly by the caſting up of the ſea out of the north. In the Summer the windes blow alongſt the coaſt, the moſt part of the time out of the north, which cauſeth that the current runneth there to the ſouthwardes, and in the Winter they blow much and ſtrong out of the ſouthweſt, and weſtſouthweſt. In the Winter men muſt bee very carefull to get off betimes, when the winde beginneth to come to the ſouth, or ſoutheaſt, then it is time to get off, for then commonly it ſhifteth to the ſouthweſt, and weſtſouthweſt with fowle weather, but when it commeth about againe to the weſtnorthweſt, or northweſt, then it is like to be good weather againe.

Road before Mamora. The road before Mamora is about a league from the land in 18 and 20 fathom, there is clean ſandy-ground.

From Mamora to Salley the coaſt lyeth ſouthweſt and by ſouth, and ſouthſouthweſt ſixe leagues; betwixt them both it is low plaine land, and ſandy-ſtrand, with double land within, which is ſo even and ſmooth, as if it were planed over. From Mamora not halfe wayes to Salley, the ſtrand ceaſeth, and from thence forth to the ſouthwardes it is a ſhore all of black ſteepe ragged rockes with little hills, ſo that men cannot judge (when they are ſomewhat off the land) that it is double land within, by the plainnes of it. Whē you are a league or two paſt Mamora, then you may ſee very plaine the high thick tower of Salley, and when you ſee the foreſayd rocky ſhore, you may be ſure that you are paſt Mamora, that ſteepe rocky ſhore continueth from thence, untill paſt Fedalle, yet betwixt Fedalle and Salley is here and there a place of white ſtrand, betwixt the rockes, but to the northwards of Salley it is not ſo, but nothing els then perfect rock's.

Salley. The towne of Salley hath a litle tower, and lieth upon the north ſide of the river, which is a low plain poynt of ſand. The caſtle hath alſo a litle tower, and lyeth over againſt upon the ſouth poynt of the River, which is a high rocky poynt. There goeth a wall round about the high thick tower, and lyeth upon a poynt on the ſouth ſide within the River. Before the River is a Barre which oftentimes with ſtorms out of the ſea doth alter and ſhift, and is caſt too, ſometimes the channell runneth by one of the two poynts, and ſometimes againe right in the middeſt of the rivers mouth. Hee that will anckor before Salley, let him bring the foreſayd high thicke tower (which ſtandeth within on the River) over the poynt of the Caſtle, to wit, over the ſouth poynt of the River, which ſhall then ſtand from him neere about ſoutheaſt, and ankor there in thirty, eight and twenty, foure & twenty, twenty, eighteen or ſixteen fathom, ſo neere or farre off as hee will, there is clean black ſandy ground, nevertheleſſe that the ſhore thereabouts is ſo full of rocks and ſtones. Being come to ankor there men muſt ſhoot a ſhot to cauſe the Moores to come off. From Salley to the Iland Fedalle the ſhore lieth alongſt ſ.w. and by ſouth about 9 or 10 leagues, betwixt them both lye here & there in the ſandy ſtrand, long black rocks (as before is ſayd) ſo that oftentimes men might take it to be Fedalle. The beſt markes for to know Fedalle by is a wood of trees about a leagne

Road before Salley.

Fedalle.

league to the northwardes of Fedalle, which ſtandeth below upon the land, & ſheweth like a barne. When you come ſayling alongſt cloſe by the land, you ſhall ſee it aboue upon the land, but when you are ſomewhat off from the land, then you ſhall ſee the land within, aboue the wood of trees, (or Barne as men doe commonly name it for the likeneſſe of it) alſo there lieth a litle round hommock about foure leagues to the northwardes of Fedalle, which you ſhall ſee aboue the reſt of the land, when you are ſomewhat off from the land, but when you come cloſe by the land, it hideth it ſelfe alſo behinde the double land. The coaſt betwixt Salley and Fedalle, is very plain and ſmooth double land, ſo that there is not another ſuch hommocke more betwixt them both, as that foreſayd hommocke, and in regard the coaſt thereabouts is altogether ſo plaine, without any places good to bee knowen, therefore men muſt take the more ſpeciall heed unto ſuch ſmall markes, for not to ſayle paſt the place where they are bound unto.

Betwixt the foreſayd Barne or wood of trees and Fedalle ſtandeth alſo a ruinous litle Towne fallen downe, in a rough wood called Monſor, when you ſayle alongſt cloſe by it, you ſhall ſee yet ſome peeces of walles of it.

Monſor.

To the ſouthwardes of Fedalle the land is againe higher, and where the high and low commeth together, it doth make a clift, thereby the Iland of Fedalle is good to be known; when that clift is ſouthſoutheaſt from you, then is Fedalle thwart of it alſo ſouthſouthеaſt from you. If you will goe into Fedalle, then runne right with the foreſayd Barne, or wood of trees, untill you come within a league, or ſomewhat neerer to the land, and then alongſt by it, and ſo you ſhall not miſſe the Iland Fedalle, but runne in betwixt it and the maine land, when that you come by the north poynt of Fedalle, then anckor betwixt the ſtrand and the foreſayd north point, but much neerer the Iland Fedalle then the ſtrand in ſixe, ſeven, or eight fathom, ſo that you come to lye with your ſhippe ſo farre in, that the foreſayd poynt of the Iland doe lye northnorthweſt from you, then lyeth the foreſayd Barne eaſtnortheaſt from you, and Monſor a handſpikes length to the northwards of the Barn or wood of trees; you may alſo ankor in 12 fathom, ſo that the poynt of Fedalle lye weſt and by ſouth from you.

Road under Fedalle

This bight within the Iland Fedalle, is a very bad place to lye in, for although you lye there ſo, that the poynt of the Iland lye northweſt, and north and by weſt from you, & with a cable on the Iland, nevertheleſſe the grown ſea commeth ſo hard rowling in about the poynt of the Iland (when the winde is weſterly) that you might rather deſire to lye in the open ſea, then within the Iland. From the north poynt of Fedalle ſhooteth off a ledge or riffe of rockes a Musket ſhot into ſea, the moſt of them lye high aboue water; within the Iland it is very flat towards the ſtrand, the Bay on the land is a faire ſandy ſtrand, there men may get ballaſt from the ſhore, but they muſt be very carefull to ſtand upon their guard, for there are dangerous people.

Before Fedalle, to wit, to the northwardes of it, thwart of the wood of trees, and all alongſt to Salley, it is all ſhowld water a league or two from the land, all alongſt that diſtance off, it is not deeper then 23, 24, and 25 fathom clean ſand-ground, thwart off into ſea from Fedalle it is alſo of the ſame depth, but fowle ground.

Depths & grounds about Fedalle.

Hee that will trade at Fedalle muſt anckor ſomwhat far in, for they haue there no Boats, men muſt fetch the Moores aboard with the Boat.

Vpon the north point of Fedalle lieth a high hommock, which ſheweth a far off when men come in, as if it were a Caſtle fallen downe, but it is nothing elſe then rocks. At the ſouth-end of Fedalle men may goe over on foote at low water to the maine land, but at high water the ſea walheth through at two places, It floweth there ſeven and eight foote up and downe.

Three leagues ſouthweſt and by ſouth, and ſouthweſt from Fedalle lyeth an old ruinous towne fallen downe cloſe upon the ſtrand called Anafee or Anfee, it is a long towne with many towers, amongſt the reſt one high thick tower almoſt like the tower of Salley, but men muſt bee indifferent cloſe by it before they can ſee it. When you are thwart of Anafee, you may yet ſee the wood of trees to the northwardes of Fedalle, which ſtandeth then to ſee to from farre as a ſaile in the water. Two leagues to the ſouthwardes, (or rather to the weſtwardes) of Anfee, or Anafee, is a ſteep poynt with redd cleues, which ſeeme a farre off as if they were houſes, ſuch ſpottes men ſhall finde at divers places on the coaſt.

Anafee.

From Anafee to Azamor the coaſt lyeth ſouthweſt and by weſt weſterly 18 leagues, betwixt them both lyeth another fallen place called Lyones. Azamor hath a point lying out on the eaſt ſide, when you come ſailing alongſt the ſhore from the northwards, Azamor lieth

Azamor.

then about or behinde that poynt upon the ſtrand, but ſtandeth high. A litle paſt Azamor lyeth a river, and thereabouts are ſome towers in the low land.

Maſagam. Three litle leagues to the weſtwardes of Azamor lyeth the town of Maſagam, on a white ſtrand cloſe by the ſea ſide, this towne is inhabited by the Portugalls, or Spaniards, it hath no towers, and ſheweth to ſee to, off at ſea, in white ſpots againſt the land. When you are thwart off from it, you ſhall ſee to the ſouthwardes the high tower of Tyto (which is a towne fallen downe about two leagues to the weſtwards of Maſagam) almoſt like the tower of Anaſee. A litle to the weſtwards of Maſagam, at the weſt poynt of the Bay, ſhooteth off a ledge or riffe of Rockes, almoſt a league off into ſea, whereof the rockes at high water, lye moſt under water, and at low water are uncovered. He that will anckor there, and is not well acquainted, muſt take in a Pilot, which may bring him to a place where is good ankor ground, for although that it be a great Bay, yet nevertheleſſe there are few places where the ground is clean; but is at many places fowle, ſo that but few ſhippes ſhould be able to lye there in cleane ground. When you lye in the right road, then lyeth the eaſt poynt of the Bay eaſt, & the weſt poynt about northweſt from you.

Tyto.

About a league to the weſtwards of Tito, lyeth a ſteepe poynt, which you come from the eaſtwards alongſt by the ſhore, you ſhall ſee no more land without the poynt, until that you come neere it; when you begin to get it upon your broad ſide, then there commeth out to the weſtwardes a great ſquare cliffe, which is very good to be knowne, and is whitiſh with reddiſh ſpots, and ſeemeth a farre off as if it were a wall. This poynt is called after that white poynt, Cape Blanco. About three leagues to the weſtwards of this C. Blanco, lyeth a litle tower upon the high land, neere by a valley called Caſa Cavalgera, & two leagues more to the weſtwards, lyeth vpon the high land another litle houſe called Emindra, but you muſt be cloſe by the land before that you can ſee it. From the foreſayd Cape Blanco to the Cape Cantin, the coaſt lyeth weſtſouthweſt, and ſouthweſt and by weſt about nine leagues.

C. Blanco.

Caſa Cavalgera.

Emindra.

C. Cantin.

Of the tydes.

ON theſe foreſayd Coaſts maketh high water a ſouthſouthweſt, and ſouthweſt and by ſouth Moone.

Courſes and Diſtances.

How the one place lyeth aſunder from the other alongſt this coaſt is here before deſcribed. 801 leagues.

FRom C. Spartell to C. Cantin it is ſouthweſt ſoutherly.

From C. Spartel to Madera weſt and by ſouth, and weſtſouthweſt 200 leagues.

From C. Cantin to Madera weſt 133 leagues.

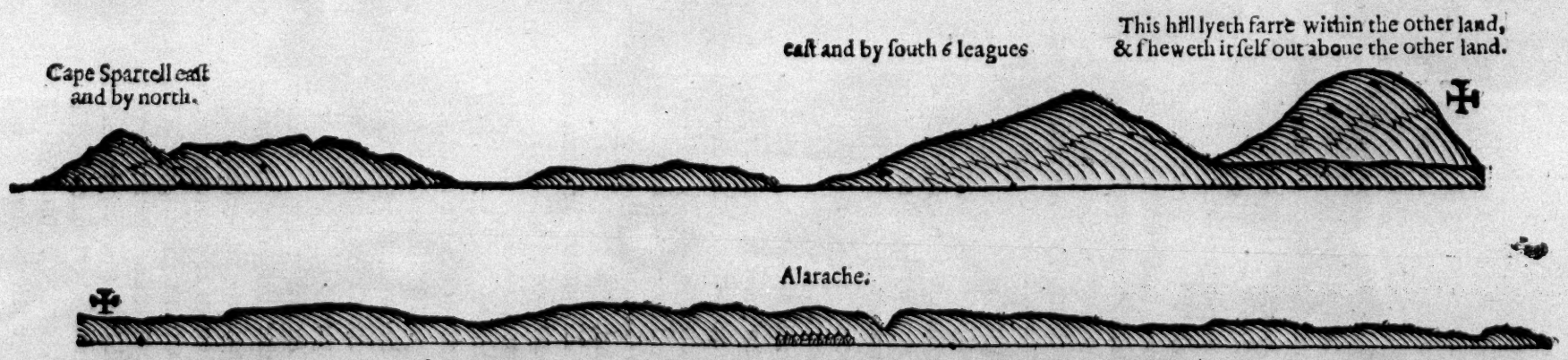
From C. Cantin to C. S. Vincent north ſomewhat weſterly. 90 leagues.

From C. Cantin to Teneriffe, ſouthweſt and by weſt 142 leagues.

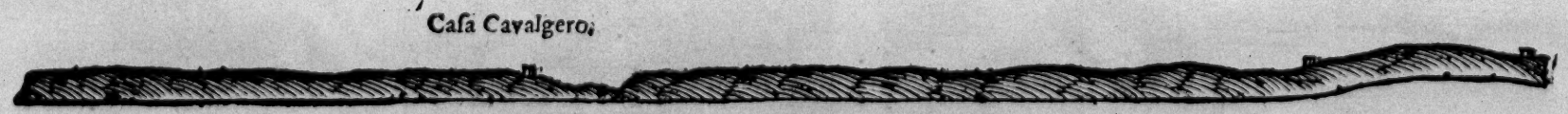
Heights.

CApe de Spartell lyeth in 35 deg. 32 min.
Maſagam lyeth in 32 deg. 46 min.
Cape de Cantin in 32 deg. 35 min.

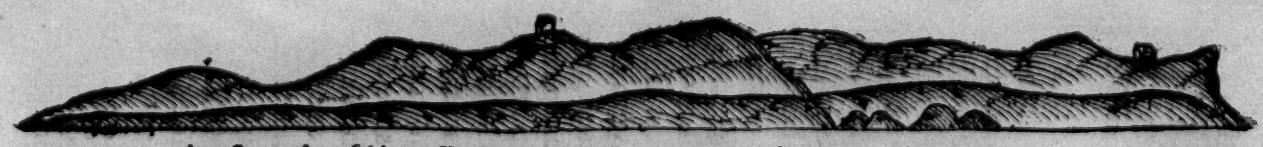
How these lands do shew themselues at sea.



The coast of Barbarie from C. de Spartell, the south poynt of the Strait to the southwards, untill past Alarache, sheweth like as is portrayed in these two figures, when the Cape de Spartell is east and by north from you about eight leagues.



Thus sheweth the land betwixt Masagam and Cape Cantin.



Thus sheweth it selfe Casa Cavalgero when it is south from you 6 leagues.

CHAP. II.

The coaſt of Barbary betvvixt Cape Cantin and Cape de Geer.

THE Cape Cantin is an even plain poynt, when you are to the northwards of it, it ſheweth flat towards the weſt, and going off towards the ſea: there ſtandeth a fire-tower upon it, but very ſmall, that ſometimes you can hardly ſee it. If you come from the northwards, or from C. Vincent, and are bound to Safia, then ſet your courſe ſouth and ſouth and by eaſt, and then you ſhal fall with the land foure or fiue leagues to the eaſtwards of C. Cantin, or if you ſaile a more weſterly courſe, you ſhall runne till you come in the height of 32 degrees & a halfe, & then the C. Cantin ſhall lye due eaſt from you, it is better to fall a litle to the eaſtwards of the Cape, then to the weſtwards of it, becauſe the windes blow there moſt commonly northerly. If you fall to the eaſtwards of the Cape, the coaſt lyeth there ſouthweſt & by weſt, & weſtſouthweſt, and it is even plain land. About ten leagues to the eaſtwardes of the Cape, lyeth that litle town Tyto, with a high white tower upon the ſea ſide, & 5 or 6 leagues more to the weſtwards (betwixt Caſa Cavalgero and Cape Cantin) you ſhal ſee a litle bight or bay, thereabouts lye upon the ſtrand by the water ſide, great black rocks, which ſhew as if they were wrackes of ſhipps, and then forth alongſt to the Cape it is a faire flat ſandy ſtrand. From the Cape ſhooteth off a ledge of rockes ſomewhat off into ſea, which men muſt avoid when they ſaile about the Cape.

From C. Cantin to the north poynt of Safia, the coaſt lyeth ſouth, or ſomewhat more weſterly fiue or ſixe leagues, betwixt them both it is a ſteepe rocky land without ſandy ſtrand, but aboue upon it plaine and even. A league to the ſouthwards of the Cape lyeth a riffe or ſhowld by the ſhore, by ſome called the Gold-banke, and lyeth about a league off from the land: at ſome times of the yeare there is much fiſh to be taken.

Safia. To the ſouthwardes of the bay of Safia is high uneven, and moſt all double land, but to the northwardes of it, it is even and plaine, thereby men may eaſily perceiue or diſcerne, whether they be to the northwards of Safia, or to the ſouthwards of it.

For to ankor in the Bay of Safia. If you will anckor in the Bay or Roade before Safia, then bring the north poynt (whereupon ſtandeth a tower) a litle more weſterly then north from you, and anckor then in 18 fathom. Or if you will anckor further in the Bay, then bring the foreſayd north poynt northnorthweſt, or a litle more northerly from you, and then the northermoſt of the two north poynts ſhall bee a ſhippes length without the ſouthermoſt, or the next unto you, run then ſo farre to the ſouthwards untill that the tower where men doe land with the boates (which is a high ſquare tower ſtanding below even within the wall of the towne) come right over a tower which is faſt to the wall, which commeth off from the Caſtle aboue, to the ſouthwardes, ſo that the foreſayd thick tower below come right over the haven, betwixt the poynt where the Caſtle ſtandeth upon the water ſide, and the rocks where men goe in betwixt. Or els anckor that the high Caſtle of Safia ſtand eaſt and by ſouth, & eaſtſoutheaſt from you, there it is ſixteen, ſeventeene and eighteene fathom deepe, good fine ſandy ground. You may alſo anckor ſo farre within in the Bay in fifteen or ſixteen fathom, that the north point come to be northweſt and northweſt and by north from you. Theſe are the Summer roades; In the Winter men muſt anckor further from the land in 28 or 30 fathom, there the ground is courſe ſand. Men may boldly run in before Safia into the road by night, there is nothing that they need to feare, which may doe them hurt, but the land.

About two leagues from Safia, lyeth the ſouth poynt of the Bay, which is a low poynt that lyeth out, and two leagues to the ſouthwards of it lyeth another ſteepe rocky poynt, without ſandy ſtrand. By it goeth in the River Tanſit up into the land unto Marrocos.

From the poynt of Safia to the Iland Mogodor the coaſt lyeth ſouthſouthweſt 19 or 20 leagues.

Iland Mogodor. Againſt the n.e. end of the Iland Mogodor, there ſhooteth off from the maine land, a great row of rockes, being hard ſharpe rockes, whereof the outermoſt, or thoſe that lye next to the Iland Mogodor, lye high aboue water: He that commeth from the northwards, and will ſaile in behinde the Iland Mogodor, muſt runne in betwixt the Iland and the foreſayd rockes, cloſe in alongſt by the rockes. It is there in comming in betwixt the Iland and the rocks fiue fathom deep. Within the foreſayd rockes lye alſo ſome other rockes on the larboord ſide, which at high water are under water, and at low water are uncovered. When you come to the end of them, you may luffe up about by them towards the main land, and

anckor

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng: en Fr. mylen 20 in een graedt

Waterplaets

Noordhoeck

Rif

Capo Cantijn

I. Mogodor

C. de Sem

C. de Tassalana

Duytsche mylen 15 in een graedt

Spaensche mylen 17½ in een graedt

Eng: en Fr mylen 20 in een graedt

Saffia

Zwijdhoeck

8 16 14 18 20 30

De Cuſten van Barbarien van C. Cantin tot de C. de Geer

Cruſtenen Pachmuſen

Moren Caſteel

Buerenmarct

S. Cruz

C. de Geer

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anckor there within them in 3 fathom at low water, there is good ſand-ground. But yet neverthelesſe it is not there very good lying, for by reaſon of the breaking of the ſea upon the foreſayd rocks, there goeth ſometimes a great ſea, ſo that it is not good lying there with a ſtorm, but further in, under the Iland it is good lying in two fathom and a halfe. From the ſouth end of the Iland lyeth off a litle riffe towards the main land almoſt to the foot ſtrand, and to the ſouthwardes of that foreſayd litle riffe, lyeth a bank off from the maine land, almoſt a league off into ſea. If you will ſaile out at the ſouthend, then run alongſt by the ſhore of the maine land, untill that you be about the foreſayd riffe, and run out then upon your lead alongſt by the banck, and then you ſhall preſently get deeper water, of 4, 6, 8, and 10 fathom, and then you may ſail there, where you deſire to be.

C. de Geer

From the poynt of Safia to C. de Geer, the courſe is S.S.W. about 43 leagues, but from Mogodor the ſame courſe about 22 or 23 leagues. It is there betwixt them both a faire flat ſand-ſtrand, with double land, which at ſome places is very high.

C. de Taffalana.

About 8 leagues to the northwards of C. de Geer lyeth a poynt called C. de Taffalana, under which men may ride in good ſand-ground for eaſt and northeaſt windes. The C. de Geer is lower then the land to the northwards of it, and falleth to the ſouthwards flat off into ſea, which men ſhal firſt perceiue when they come within three or foure leagues of it. About 4 leagues to the northwards of the Cape lyeth a high hommock within the land, and further northwards the land is yet higher; but when you come thus from the northwards neere C. de Geer, you ſhall ſee no more land to the ſouthwards of it. When you come to the point you muſt giue the riffe a birth that lyeth off from it, and runne about by it, and then forth ſoutheaſt and by eaſt, and ſoutheaſt 7 or 8 leagues to S. Cruz, and then you ſhall ſee the Moores Caſtle ſtand on the high land: thwart of it lyeth a row of rockes, about a Calliver ſhot in length, els it is all a cleane and cleare coaſt. For to anckor there in the Bay, runne ſo farre into the Bay, that the foreſayd Moores caſtle ſtand north from you, and the Chriſtians packhouſes northeaſt, there it ſhall be deepe (to the ſouthwardes of the foreſayd row of rocks) 7 and 8 fathom, the north point or C. de Geer, ſhall then be from you northweſt and by weſt, there is the beſt road. In the Summer time you may anckor neerer to the ſhore, untill you come in 6 and 7 fathom. When you ſayle from C. de Geer towards the Playe or the Roade, you muſt bee carefull to keepe cloſe aboord of the land of the Cape, and run alongſt by it, untill you come before the Caſtle. If you runne farre off from the ſhore, you ſhall with northerly windes (which blow there much) be conſtrained to come in northeaſt and northnortheaſt again for to recover the ſhore, therefore it is beſt to keepe cloſe aboord the high land. Hee that ſhould come into the Road here by night, muſt not (upon a certain great forfeiture) come neerer the ſhore then in 12 or 14 fathom.

Riffe of C. de Geer.

Road before S. Cruz.

In this Road men muſt be very carefull and ready with their ankors, the ſmalleſt bower muſt be alwayes layd out for the wind, which bloweth off the land, and the other ankors to ſeawards. The ſhoot anckor muſt alſo bee alwayes ready againſt a ſtorme (which men may very well perceiue before by the ſwelling or riſing of the ſea) to bring it out in the ſouthweſt. Alſo it is needfull to keepe the foreſaile to the yard, for to helpe themſelues with it the beſt that they can, if it ſhould happen that they ſhould be forced from their anckors.

In this Bay is much fiſh to be taken, when men lye there in the roade, they take their turnes to goe out to fiſh.

Courſes and Diſtances.

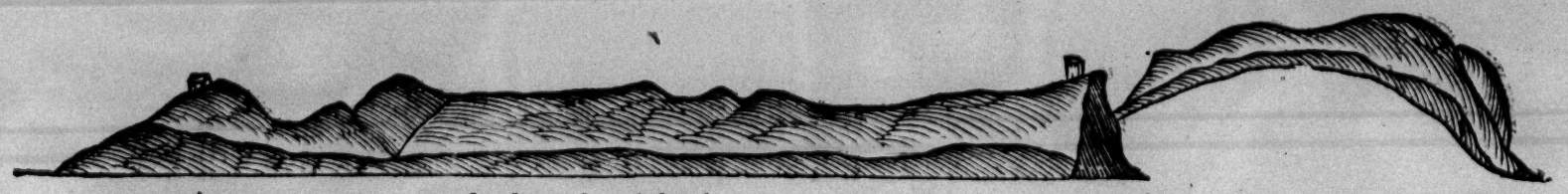
FRom Cape Cantin to Cape de Geer ſouthſouthweſt 50 or 52 leagues.
From Cape de Geer to C. de Non ſouthſouthweſt, and ſouth and by weſt 27 leagues.
From Cape de Geere to the poynt of S. Cruz, ſoutheaſt 5 leagues.
From C. de Non to Offin ſouth 13 leagues.
From Cape de Non to Cape de Baiador ſouthweſt and by weſt 69 leagues.
From Cape de Geer to C. de Baiador ſouthweſt ſomewhat weſterly 93 leagues.
From Safia to Madera eaſt & weſt 130 leagues.
From Cape de Geer to Madera weſtnorthweſt — — 133 leagues.

Heights.

CApe de Cantin lieth in 32 degrees 32 min.
The Iland Mogodor in 31 degrees 8 min.
Cape de Geer in 30 degrees.
Cape de Non in 28 degrees 32 min.
Cape de Baiador in 27 degrees.

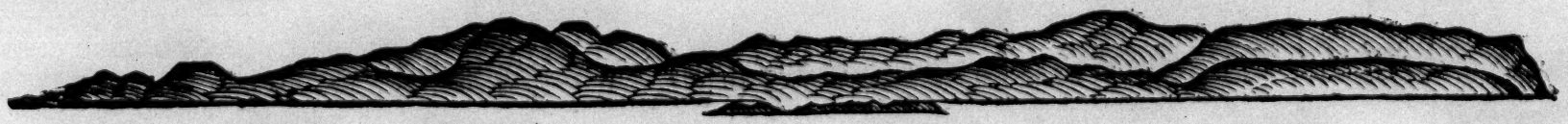
Howw theſe lands do ſhewv themſelues at ſea.

When the north poynt of Safia lyeth ſ.ſ.e. fiue leagues from you, it ariſeth in this forme.



When Cape Cantin is northeaſt and by eaſt ſixe leagues, and the poynt of Safia eaſtſoutheaſt foure leagues from you then they ſhew themſelues thus.

Thus ſheweth the land to the ſouthwards of the ſouth poynt of the Bay of Safia when it is eaſtſoutheaſt three leagues from you.



Mogodor.

When you are weſtnorthweſt, or thwart off from Mogodor, three leagues, the land ſheweth it ſelfe thus. It is a high and double land.

De tijhavens, Porto de Naos en Porto de Cavallos aen de Zuijd-oostzijde van Lãcerota

LANCEROTA

Porto de Naos

Capen oste Warders

Kerck

Capen oft Warders

Porto-de-Cavallos

Groot Canaria

Canaria

Duytsche mylē 15 in een gra:

Spa: mylē 17½ in een graedt

Eng: en Fr: mylē 20 in een gr:

De Eylanden
Lancerota For
teventura en
Groot Canarien

Alagranca

Graciosa

C. Lalazon

Lãcerota

Lãcerota

P.ta Nãos

P.ta Canallas

I. de Lobos

Fortaventura

C. Cabriton

I. Fortevent ura

Bergh metten
beschen

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I. Palma

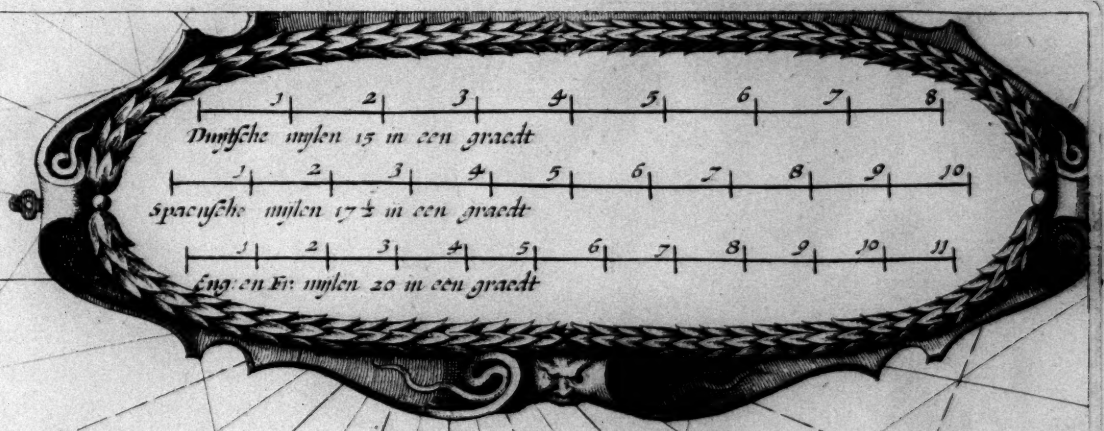
S. Cruz

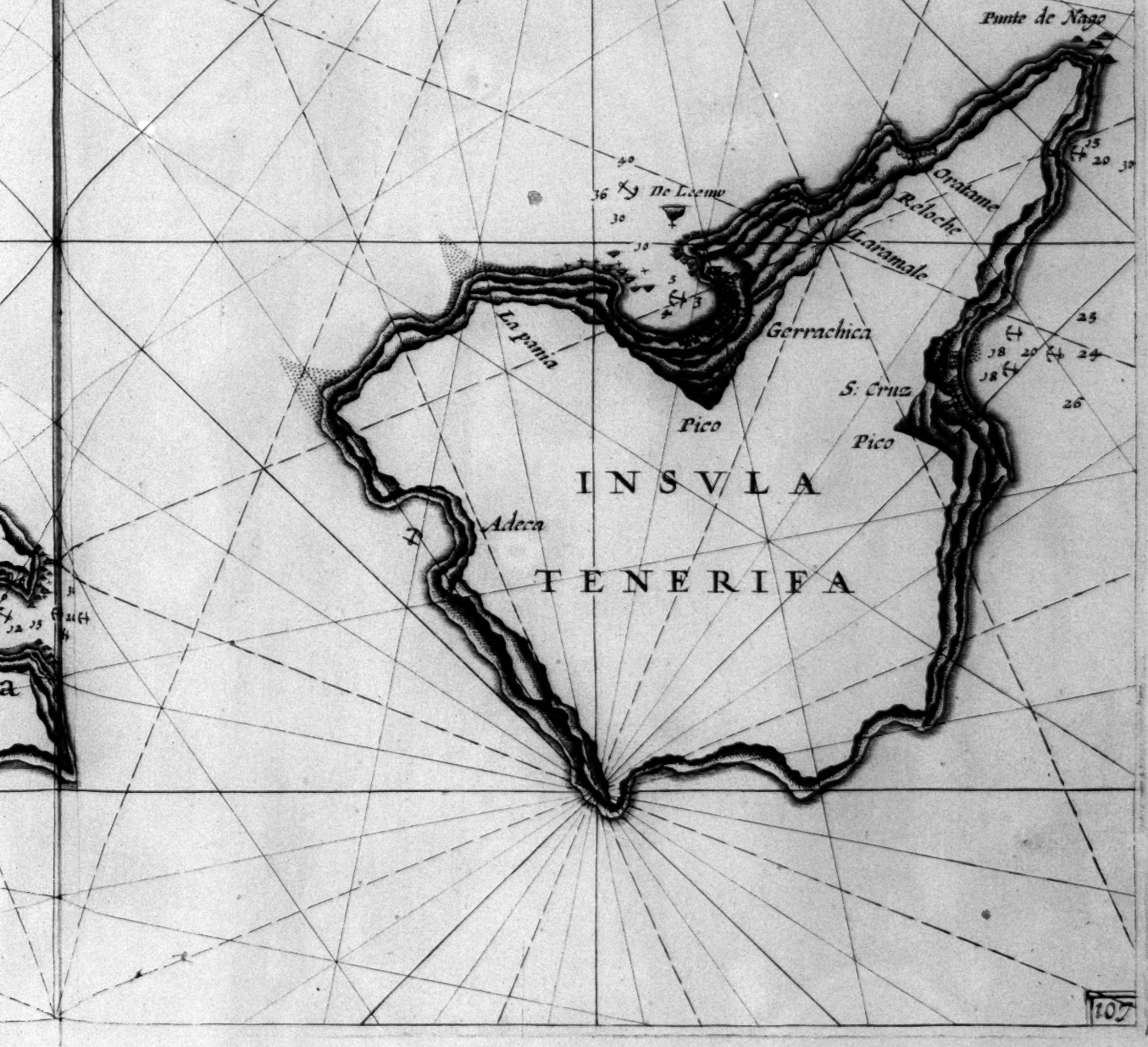
Rammelrede

Tassacorda

De Eÿlanden
Tenerifa
Palma Gomera
en Ferro

Ferro

I. Gomera

1 2 3 4 5 6 7 8
Duytsche mylen 15 in een graedt
1 2 3 4 5 6 7 8 9 10
Spaensche mylen 17½ in een graedt
1 2 3 4 5 6 7 8 9 10 11
Eng: en Fr: mylen 20 in een graedt


Punte de Nago
Oratame
Reloche
Lavamale
De Leeuw
La Punta
Gerrachica
S. Cruz
Pico
Pico
INSVLA
Adeca
TENERIFA
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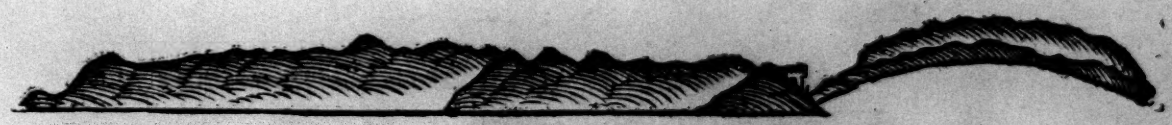
C. Taffelana.

When the Cape de Taffelana is n.n.e. three leagues from you, the land sheweth thus vnto Cape de Geer.



C. de Geer.

When the Cape de Geer is northnorthwest three leagues from you, it sheweth thus, and then the Bay is east and by south from you, the land is with sand-hills.

CHAP. III.

Of the Canaries Flands.

THE chiefest Ilands of the Canaries are seven in number, Lancerota, Forteventura, or Porteventura, Great Canaries, Teneriffe, Gomera, Palma, and Ferro.

The Iland Lancerota lyeth from Cape S. Vincent southsouthwest distant about 165 leagues. It hath one haven upon the northeast end, betwixt the two Ilands Alagranca and Gratiosa, where men may come in from the northwardes, and lye land-lockt for all windes, it is deepe there ten, fifteen, and twenty fathom, and they may sayle out againe to the southwardes alongst by Lancerota.

At the east side of Lancerota is a good road before the Town of Lancerota, there lyeth a banke to the northwardes of it, which men must avoyd, and runne about to the southwardes of it, there they may anckor in ten eleven and twelue fathom.

On the same southeast side lye also two bard havens, a great shot of a cast peece, one from the other, the northermost is called Porto de Naos, and the southermost Porto de Cavallos, which wee haue demonstrated in a large volume in the northwest corner of this Card, and shewed the depths with numbers of feet at high water and spring tyde.

Porto de Naos. Porto de Naos, the deepest of these bard havens goeth in northwest and by north betwixt two ledges of rockes, there stand two beacons of heapes of stones in manner as the warders in Norway, which you must bring and keep one in the other, and sayle so right in through betwixt the two foresayd ledges of rockes. The shouldest of the Barre betwixt the two ledges of rockes, is but a short space, a great shippes length long, and is deep at high water seventeen foot, and at low water seven foote, so soone as you shall be over, it will be presently twenty, foure and twenty, sixe and twenty, and eight and twenty foot deepe, then you must edge up north, and then presently northeast, and ankor behinde the rocks, which lye to the northwards of the Barre, in the chanell the ground is rocky, hard, and uneven. If a ship should come to strike there, she should presently be broken. The ledge is so without, as it is within, very steep, so that you may come very close unto it, where the anckors stand marked, it is altogether cleane sandy-ground, thirty, foure and thirty, and fiue and thirty foot deep at high water. With a sea wind there can goe here a great sea, but that happeneth seldom, for the windes do blow most out of the north and northeast, and therefore it is almost alwayes there smooth water. This haue

is very narrow betwixt the rockes, which lye to ſeawards of you & the ſhore, it is but a little more then a great Cables length broad, and from the havens mouth to the maine land about a Cables length and a halfe. The havens mouth alſo is not broad, but at high water the rockes doe flow a good wayes on both ſides under water, which at low water againe are uncovered.

Betwixt Porto de Naos and Porto de Cavallos lye two litle Ilands, the northermoſt is the greateſt, at high water men may goe thorough with boates within the Ilands, into Porto de Cavallos, but not with ſhippes, for at low water it falleth dry there within. Vpon the ſouthermoſt litle Iland ſtandeth an old Caſtle fallen downe, which heretofore hath been ſpoyled by Engliſhmen. From the ſouth ſide of that litle Iland ſhooteth off a riffe, and to the ſouthwards or the weſtwards of it lieth in the Barre, which is very narrow, not aboue ten fathom broad; upon the maine land ſtand alſo two litle beakons, as at Porto de Naos, which you muſt bring one in the other, and ſaile ſo right in. At high water and Spring tyde there is no more then twelue foot water, or a halfe foote more, the ground in the havens mouth is alſo hard, & nothing els then rocks, where you muſt goe in over, but within it is clean ſandground, where you may lie a ground without any danger, with a ſhip that draweth ten or eleven foote water. At the higheſt water, the moſt part of the rockes on both ſides of the havens mouth, lye under water, ſo that at many places men may goe over them with boats. At low water there remaineth in this havens mouth no more then a foot or a foote and a halfe depth, ſo that a ſhippes boat cannot go in; within men lye landlockt for all winds, and although it blow very hard, yet the water is alwayes ſmooth; In both theſe havens a ſouth and by weſt, and north & by eaſt moon maketh high water. Neere theſe havens there are no houſes where Spaniards or Moores do dwell, then onely by Porto de Cavallos a litle Church, where they haue Maſſe ſayd on Sundayes when ſhippes lye there. Men goe from thence betwixt the mountains to the town, which lieth 3 leagues from thence. He that wil come here muſt provide himſelfe with freſh water, for there is very ſeldom freſh water to be gotten. Vpon this Iland there groweth neither fruite nor wine. In ſome good yeares it giveth out Wheat, Barley, and Orſilly, the inhabitants are Moores under the command of the King of Spaine.

Betwixt Lancerota and Forteventura lyeth
I. de Lobos a litle Iland called Ile de Lobos, which is on the outer ſide, to wit, on the northweſt ſide, very fowle. Men may anckor on both ſides of that Iland in ſifteene or twentie fathom, alſo in ſixe fathom, a ſhot of a caſt peece ſouthweſt and by weſt from the weſt poynt of the Iland, there men may lye land-lockt for all windes, except for a north, northweſt and ſoutheaſt winds. The coaſt of Forteventura is at the northeaſt end very fowle, with many riffes that lye out, whereupon the ſea doth breake exceedingly.

The Iland of Great Canaries lyeth from Forteventura weſt nineteene or twenty leagues diſtant. The roade there lyeth, at the eaſt ſide of the Iland, behinde the northeaſt poynt, thwart of a Caſtle that ſtandeth upon a Chindle. The foreſayd northeaſt poynt, is a very high poynt, with a long ſmall and low ſand-ſtrand faſt to the other land, ſo that when it is ſiue or ſixe leagues northweſt or ſoutheaſt from you, it ſeemeth to bee an Iland aſunder off from the other land. If you deſire to goe in there into the roade, then ſaile about by that northeaſt poynt, alongſt by the Iſolettes, leaving them on the ſtarboord ſide of you, untill that the Caſtle doe lye neere about northweſt and by north from you, anckor there in eight, nine, ten, or twelue fathom, then lyeth the northpoynt northeaſt and by north, and the ſouth poynt ſouthſoutheaſt from you. Great Canaries.

At the ſouth end of the Great Canaries is a faire ſand-bay called Maſpalomba, there is a good road for northerly winds, and freſh water to be gotten.

The north point of the Great Canaries, and the northeaſt poynt of Teneriffe called Punte de Nago, lye weſtnorthweſt and eaſtſoutheaſt diſtant one and twenty leagues. In Teneriffe is a Roade on the ſoutheaſt ſide before the Towne Saint Cruz, there is a faire ſand-bay, a litle to the northwardes of the towne is the beſt road in twenty, or foure and twenty fathom, and then Punte de Nago, the northeaſt poynt of Teneriffe lyeth northnortheaſt from you, and the ſouth point ſouth and by weſt. When the Pico of Teneriffe is weſtſouthweſt from you, then are you open before this road of S. Cruz, and when you lye in the Road of S. Cruz, you may ſee the Iland of Great Canaries ſoutheaſt from you about 13 leagues. Teneriffe. Punte de Nago. S. Cruz.

On the northweſt ſide of Teneriffe lyeth the road of Garrichica, from the northeaſt poynt Punte de Nago weſtſouthweſt, and ſouthweſt and by weſt eight or nine leagues. He that will anckor before Garrichica, let him anckor to the weſtward of the rock with the croſſe caled Garrichica

the

The Lyon. the Lyon, ſo that the foreſayd rock doe lye ſoutheaſt and by eaſt, and ſoutheaſt from him, then he ſhal ly right before the town, & may ſee right into the ſtreet of the town, through the Cloyſter of S. Dominicus, there is cleane ground in ſixe and thirty or forty fathom, the Pieck lyeth then over the weſt ſide of the towne; neerer to the land or to the rock then in fiue and thirty or ſixe and thirty fathom, it is not cleane, and weſtwards towards the riffe Lapapia it is alſo fowle ground. This is a dangerous road, therefore every one that commeth here, muſt be very careful to haue their anckors, cables and ſailes very preedy and ready for to ſhift roades as ſoone as it beginneth to be a ſtorme.

Haven in Garrichica There is alſo a litle haven before Garrichica, where men may lye with a few ſhippes. For to ſaile in there you muſt haue a Pilot. On the weſt ſide of the havens mouth lyeth a rock under water, but the ſea breaketh alwayes upon it, you may anckor within in the haven in fiue or ſixe fathom, and muſt bring two ankors out a head to ſeawards, with a cable on the rocks, and an ankor out a ſtearn, on the land, ſo that the ſhippe cannot wend to and againe, the ground is there fowle, you muſt buye up your cables with buyes and caske for to keep them from the ground. This is a good haven in ſummer, then it is commonly good weather, but in the winter it is not good to come in there with a ſhip, for the grown ſea out of the northweſt commeth running in there ſometimes ſo forcible and ſtrong, that it is not poſſible to hold a ſhip, although ſhe had ten ankors out. It hath happened certaine yeares paſt, that there was loſt in the ſame haven a great many ſhips, and a great many houſes of the ſame town waſhed away with the great water.

Betwixt Garrichica and the eaſt end of Teneriffe, are three lade places more for to lade wine at, as Laramela, Relecho, and Oratama.

Laramela Relecho, Oratama, Adeſſa.

At the ſouthweſt end of Teneriffe lyeth alſo an other litle haven or Bay, where is much wines laden, called Adeſſa, there is alſo good lying, except it be with a ſouthweſt winde, which bloweth there open in.

Palma. From Teneriffe to the Iland La Palma, the courſe is weſtnorthweſt 20 leagues. On the ſoutheaſt ſide of the Palma lyeth a faire Bay, with a Towne and lade-place called S. Cruz. He that commeth from the northwards, and deſireth to anckor in the Road, let him run ſo farre in the Bay, untill he be to the ſouthwardes, or paſt the head, or the bridge, and anckor there in fiue and twenty or thirty fathom. In winter time men muſt not anckor ſo neere the ſtrand becauſe of the ſoutheaſt or ſouthſoutheaſt windes, for then they ſhould lye too neere the ſtrand. Men lye there morred with two anckors for the ſea winde, with a ſmall anckor out a ſtearne for to keepe the ſhippe right in the roade, there lyeth to the eaſtwardes of the Towne, a high white rocke with a croſſe, there is the beſt road. A litle to the northwards of the towne, is a faire ſandbay, there is good anckoring in twenty, thirty, or fiue and thirty fathom, according as men will lye farre off, the Road is called the Rammell Road. When men lye in the Road of Palma, they may ſee the Pieck of Teneriffe lye eaſtſoutheaſt from them. The Iland Palma is very high and full of trees, whereby it is good to be knowne.

S. Cruz.

On the ſouthweſt ſide of the Palma is another place where men lade wines, called Taſſa Corda.

About fiue leagues weſt from the weſt end of Teneriffe, lyeth the Iland Gomera, which hath on the northeaſt ſide a good haven of ten fathom deepe, where is good lying almoſt for all windes, better then in any of the other Ilands, but there is nothing to lade: Men may alſo anckor without before the haven in twenty fathom, but they muſt ſhift roades there, as at Garrichica. Gomera.

The Roade of Adeſſa in Teneriffe lyeth right over againſt it, eaſt off from it about fiue leagues.

The Roade of Palma lyeth from this haven in Gomera northweſt and by north ſixteene leagues.

The Iland Ferro lieth from the Iland Palma ſouth and by weſt diſtant thirteen leagues. Ferro.

Of the tydes.

ON the Ilands of the Canaries maketh at the moſt places the naturall tyde, to wit, a ſouthweſt and northeaſt Moone the higheſt water.

How theſe lands lye one from the other, and from other lands.

FRom the weſt poynt of Forteventura to the Iland of great Canaries eaſt and weſt — — 19 or 20 leagues.

From the north point of the Canaries to Punte de Nago the northeaſt point of Teneriffe weſtnorthweſt 21 leagues.

From Punte de Nago to Garrichica w.ſ.w. and ſouthweſt and by weſt 8 or 9 leagues.

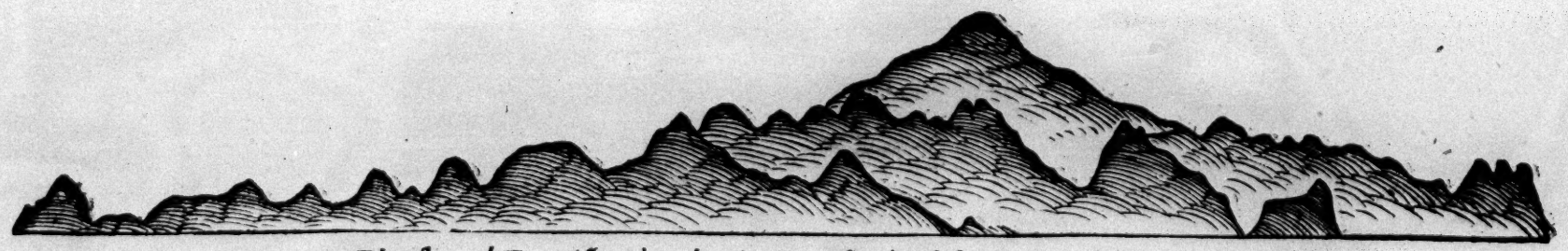
From Teneriffe to Ile de Palma weſtnorthweſt — — 20 leagues.

From the weſt end of Teneriffe to Gomera weſt 5 leagues.
From the Palma to Ferro ſouth and by weſt — — — 13 leagues.
Frō Great Canaries to Salvages northnorthweſt — — 40 leagues.
From Garrichica to Salvages northnortheaſt — 29 or 30 leagues.
From Teneriffe to the Ile de Madera north — — 72 leagues.
From Great Canaries to the eaſt end of Madera north and by weſt 85 leagues
From the Palma to Madera north and by eaſt — — 53 leagues.
From Salvages to the Serters of Madera north — — 40 leagues.
The outermoſt of the Serters lyeth from Madera 4 leagues.
From Madera to S. Michiels n.w. 136 leagues.
From the weſtend of Forteventura to the C. de Bajador ſouthſouthweſt 20 leagues.
From Lancerota to the C. S. Vincent northnortheaſt 165 leagues.
From Great Canaries to Cales northeaſt 240 leagues
From Great Canaries to the Cape S. Vincent, northeaſt and by north 210 leagues.
From Great Ganaries to Roxent n. n. e. ſomewhat eaſterly 240 leagues.
From Great Canaries to Cape de Finiſterre n.n.e. ſomewhat northerly 307 leagues.
From Teneritte to the Lizart northnortheaſt diſtant 467 leagues.
From the Palma to Cape S. Vincent northeaſt — — 224 leagues.
From Madera to Cape de Geer eaſtſoutheaſt — — 133 leagues.
From Madera to Safia eaſt 130 leagues.
From Madera to Cales e.n.e. 200 leagues.
From Madera to Roxent n.e. 173 leagues.
From Madera to the C. Finiſterre northeaſt & by north ſomwhat northerly 245 leagues.

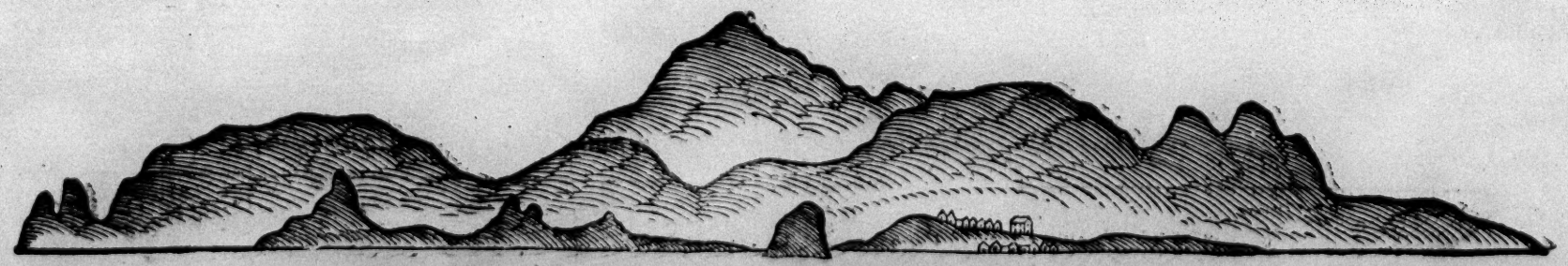
Heights.

THE Iland Lancerota lyeth in 28 degrees 35 minutes.
The North end of the Great Canaries lyeth in — — 28 degrees.
The north end of the Teneriffe in 28 degrees, 40 minutes.
Ile de Palma in 28 degrees, 52 minutes.
Salvages in 30 degrees
The ſouthermoſt part of Madera in 32 degrees
But the northermoſt in 32 degrees, 30 minuts.
Porto Santo in 33 degrees.

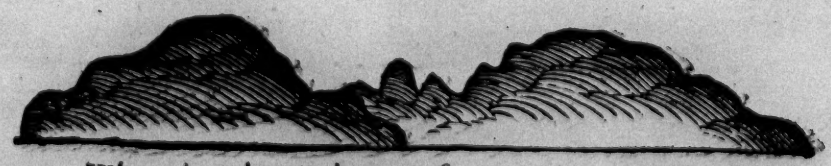
Thus



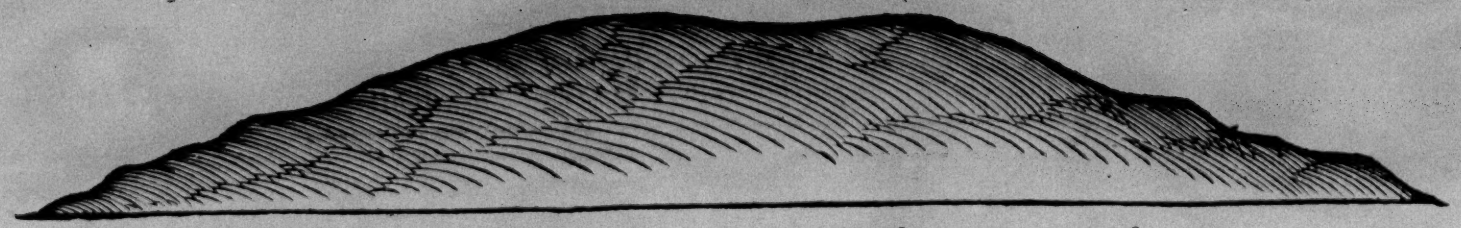
Thus sheweth Teneriffe, when the Pico is westsouthwest from you, and then you are open before the Roade of S. Cruz.



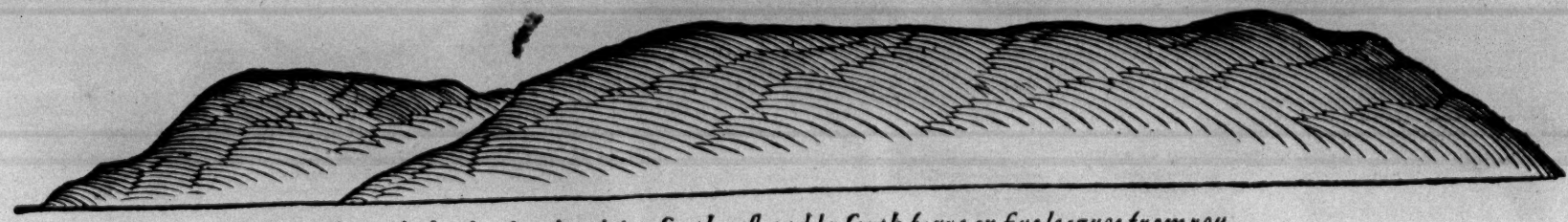
Thus sheweth Teneriffe when the Pico is southeast from you, and then are you open before the Roade of Garrichica.



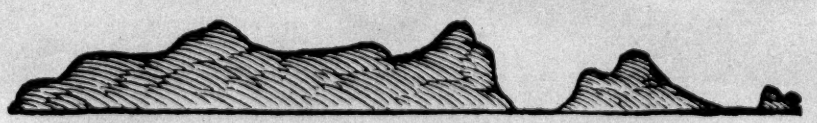
When the Palma is about east from you sixteen or seventeen leagues, then it ariseth thus.



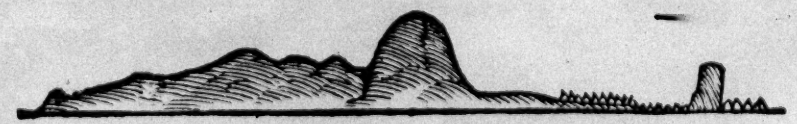
Thus ſheweth the Iland Palma being ſouth and ſouth and by eaſt nine or ten leagues from you.



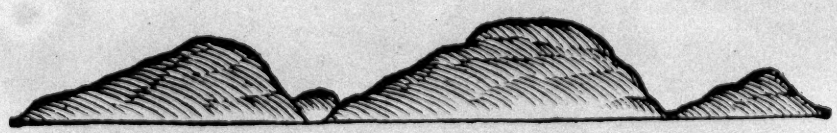
Thus ſheweth the Iland Palma being ſouthweſt and by ſouth foure or fiue leagues from you.



When Salvages is eaſtnortheaſt fiue leagues from you it ariſeth thus.

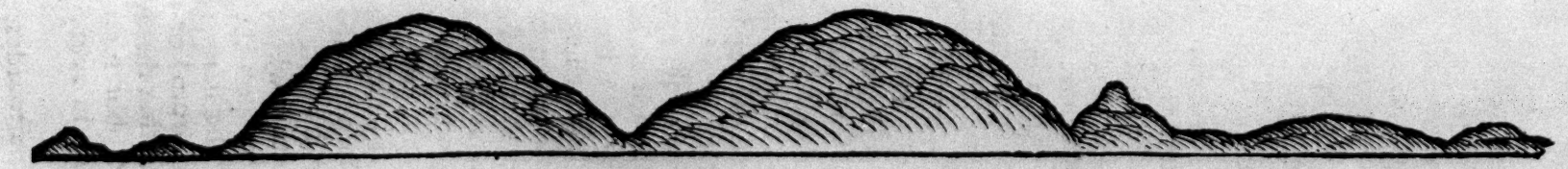


When Salvages is eaſtſoutheaſt fiue leagues from you, it ſheweth it ſelfe thus.

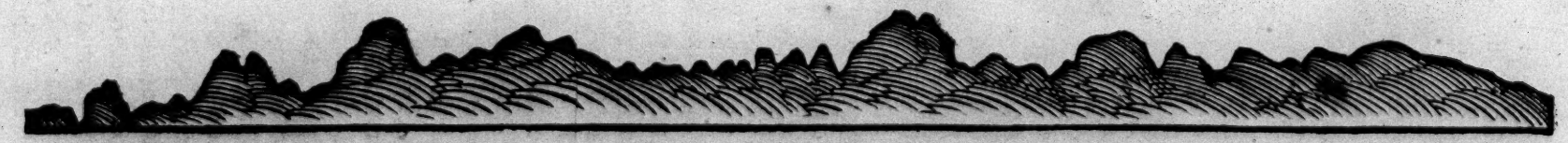


When Porto Santo is ſouth and by weſt from you about 9 leagues, then it ſheweth it ſelfe thus.

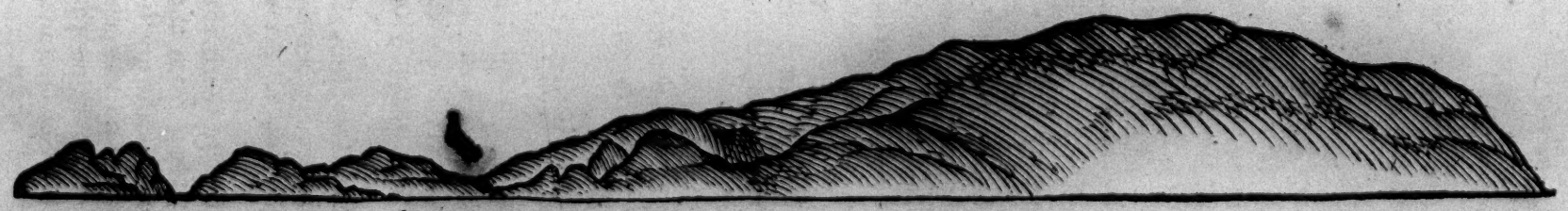
VVhen



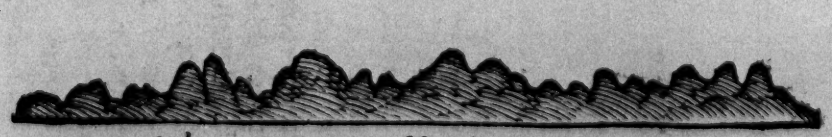
When Porto Santo is about south, fiue or sixe leagues from you, then it sheweth it selfe thus.



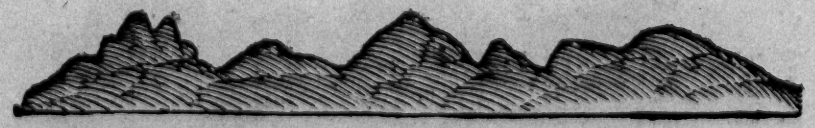
Thus sheweth the Iland Madera, when you come from the northwards, and that the middest of the land is 10 or 12 leagues from you, the southeast end is very ragged when you are neere by it, the northwest end is a steep point going sloping downe.



Thus sheweth the Iland Madera being southwest from you.



When Madera is westsouthwest from you thirteen leagues, it ariseth thus.



When Madera is south from you sixteen leagues it sheweth it selfe thus.

CHAP. IIII.

Of Porto Santo, Madera, and the Azores Ilands.

FROM the Cape S. Vincent southwest and by west 140 leagues, and from the Cape de Finisterre south-southwest, and southwest and by south 232 leagues, lieth the Iland Porto Santo, lying southeast and northwest, upon each end of this Iland lyeth a great rock. The Road is on the southwest side, to the eastwards of the ragged rock, before a little haven where men may lye land-lockt with boats. Porto Santo.

The Iland Madera lyeth from Porto Santo southwest sixteene leagues. Southwardes from the east poynt of Madera, lye three small rocky Ilands, being called the Serters, the northermost is the smalleſt, and lyeth about a league from the land from the foresaid poynt, the southermost is the greateſt, and lyeth foure leagues from the land. Hee that commeth from the northwardes, or from Porto Santo, may saile through betwixt them and the poynt of Madera, it is there betwixt them broad and wide, and also cleane and cleare every where, onely at the foresayd east poynt of Madera lyeth a suncken rock, whereof men must take heed. Madera. Serters.

At the south side of the Iland before the Towne Saint Cruz is a good Road in twenty fathom, but before Fonsiall is the chiefest Road for to lade: to the westwardes of the towne lyeth a great rock with a crosse called the Lyon, by it is the best lying in thirty or forty fathom. S. Cruz.

At the southwest side before Marasilo is also good anckoring in sixteen or eighteen fathom. In all these foresayd places is good ground for to anckor in. Marasilo.

Betwixt Madera and Teneriffe lyeth the litle Iland Salvages, to wit, south from the Serters forty leagues. North from the northeast poynt of Teneriffe seven and twentie leagues, and northnorthwest from the northeast poynt of Great Canaries, forty, or two and forty leagues, it lyeth southwest and northeast; and is about a halfe league long. The southwest end of Salvages is fowle farre off into sea, therefore runne rather about to the eastwards of it then to the westwards. Three or foure leagues southwest from that poynt, amongst other rockes, lyeth one great rock which sheweth a farre off like a Sayle. Vnder the southeast side of the Salvages is a good road for a northwest and west winde. Salvages.

Madera and the Iland S. Michiels lye northwest and southeast 135 leagues distant. At S. Michiels, the Roade is at the southwest side of the Iland, when you come about one of the two points, either from the east or west, then you shall see two litle townes. Before the westermost called Punte de Gada, or Punt Alagato, is the Road in 20, and 25 fathom. S. Michiels. Punte del Gado.

Before the eastermost litle towne lyeth a litle Iland, betwixt that and the land of S. Michiels it is fiue, sixe and seven fathom deepe. Betwixt these two litle townes, the coast lyeth westnorthwest and eastsoutheast.

From S. Michiels to Tercera the course is northwest and by west foure & thirty leagues. Vnder Tercera the Roade is on the south side of the Iland, to the westwardes of the rocks, right before the towne Angra, betwixt two poynts that lye out, upon each of them standeth a Castle for defence of the shippes which lye there in the Road, the westermost of the two poynts lyeth a good wayes further out to seawardes then the eastermost, and hath upon the end of it, two very high hills, called Brasill; when you come out of the sea, either from the eastwards or the westwards, it seemeth a farre off as if it were asunder from the land. These two foresayd hills upon the poynt of Brasill, are so high, that in cleare weather men may see from thence sixteene or seventeen leagues farre off into sea. Vpon it stand two pillars, which men may see every where in the towne Angra, and a watchman thereby for to keepe watch, and to giue them of the towne watning of the shippes that come about the Iland. As many shippes as he seeth come from the westwards or the southwards, that is, from the West-Indies, Brazill, or the Portingalls Indies, so many Flagges he setteth up upon the pillar towards the west; when hee seeth more then fiue shippes, then he setteth up a great Flagge, which signifieth a whole Fleete. Likewise he doth the same upon the other pillar towardes the east, for the shippes which he seeth come from the east, from Portingall or from the northwards, so that there cannot a shippe come thereabouts, but men may see it presently by that token in every corner and street of the towne. Tercera. Angra,

Hee that commeth from the eastwardes, or the northwardes, and is bound in to the Roade of Tercera, let him runne faire by the land of the east poynt, and alongst by it unto the two little Ilands, called the Ilheos, which lye a little the eastwardes of the Road, about For to saile into the road of Tercera.

I MADERA

Fonſyael

S.Cruz

Maraſylo

35
37
20 32
30

35
25 30
40
50

D. Leeuw

20 20
25
30

De Reede van Punte
del Gada int eijlandt
S. Michiels

Punte del Gada

Villa Franca

d'Eylanden Madera en Porto Santo

Porto Santo

32
7
20
15

Serters

Duijtsche mijlen 15 in een graedt
1 2 3 4 5 6

Spaensche mijlen 17 ½ in een graed.
1 2 3 4 5 6 7 8

Eng: en Fr: mijle 20 in een gra:
1 2 3 4 5 6 7 8

De Reede voor de Stadt Angra int eijlandt Tercera

30
35
9
20
20
25

Os Ilhoes

Los Frailes

about a bow ſhot one from the other. Men may runne alongſt to the ſouthwards of theſe Ilands, or to the northwards of them, as they will, and alſo betwixt them both. Betwixt theſe litle Ilands and the maine land of Tercera, it is a great Cannon ſhot broad, and fifteen and ſixteene fathom deepe, through betwixt the litle Ilands it is fiue and ſixe fathom deepe cleane ſand-ground. Somewhat to ſeawards of theſe little Ilands, lye three or foure rockes aboue water, called Los Frayles. Being paſt theſe foreſayd little Ilands, you muſt ſayle to the weſtwardes, untill that you come neere to the foreſayd poynt of Braſill, a little to the eaſtwardes of it you muſt anckor before the towne of Angra in 10 and 12 fathom, or els men lay their ſea-anckor commonly in ſixteene, and their ſmaller anckor towards the land in eight or nine fathom. Men lye there land-lockt for a ſouthweſt, weſt, north, and northeaſt, and alſo for an eaſt-northeaſt winde, but a ſoutheaſt winde bloweth there flat open in. On the weſt ſide of the poynt of Brazill is alſo a great ſandy Bay for to anckor in, before a village called S. Martin.

Los Frayles.

Three leagues to the eaſtwards of the town Angra, lyeth a bight called Porto Iudeo, there the Spaniards landed with their forces, when they tooke in the Iland from the Portingalls.

Porto Iudeo.

He that will ſaile from Tercera to Fayall, let him ſet his courſe weſtſouthweſt to the eaſt poynt of Saint Georges, which is from thence ten leagues aſunder. Further betwixt the Pico and Saint Georges through to Fayall are ſixteene leagues, it lyeth moſt weſt-northweſt through betwixt them, the Iland Fayall lyeth to the weſtwardes of the Iland of the Pico a great league aſunder off from it.

Fayall.

He that will ankor in the Road of Fayall, let him ankor right before the village of Fayall in 14 or 15 fathom, there is ſand-ground; but there goeth a hard tyde both of flood and ebbe.

On the ſouthweſt end of the Iland Fayall lyeth a little haven; for to ſayle in there, you muſt runne in by the ſouthweſt poynt, ſo long about by the ſhore, untill that you ſee the haven open, ſayle alongſt about by the ſouthweſt poynt, untill that you come in the narrow, betwixt the rocks which lye off from the weſt ſide, ſo ſoone as you come within the rockes, let preſently your anckor fall in fiue fathom, and bring hawſers on the eaſt ſide on land, faſt to the pales, which are there made for the purpoſe. The haven is litle, ſo that men may lye in it with no more then with foure or fiue ſhips. Further in it is ſhowld water.

Haven in Fayall.

How theſe lands doe lye one from the other, and from other lands.

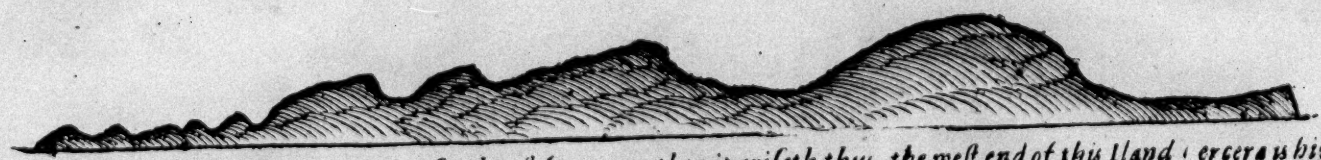
FRom S. Michiels to Tercera northweſt and and by weſt 34 leagues.
From Tercera to the eaſt end of S. Georges weſtſouthweſt 10 leagues.
From the eaſt end of S. Georges to Fayall weſtnorthweſt 16 leagues.

FRom Saint Michiels to the C. de Finiſterre eaſtnortheaſt 247 leagues.
From Tercera to Roxent, or the River of Liſbon eaſt at leaſt 267 leagues.
From Tercera to C. de Finiſterre eaſtnortheaſt, and eaſt and by north 280 leagues.
From Tercera to the Lizart northeaſt and by eaſt — — 387 leagues.

Hovv theſe lands do ſhevv themſelues at ſea.

Thus ſheweth the Iland S. Michiels on the north ſide.

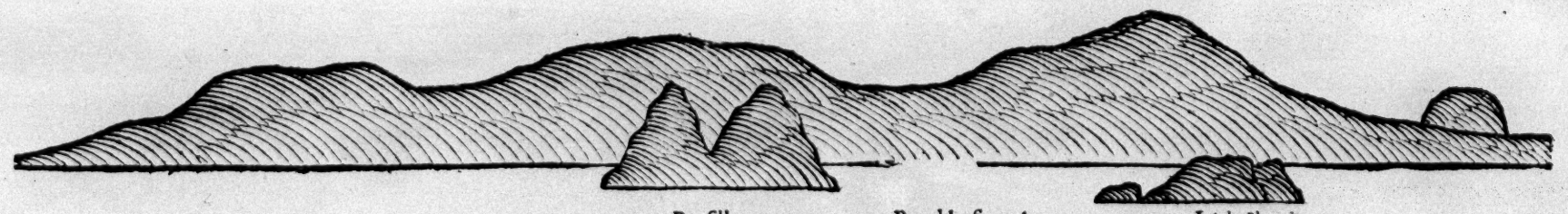
Thus ſheweth the Iland of Tercera when it lyeth east and by ſouth about ſeven leagues from you.



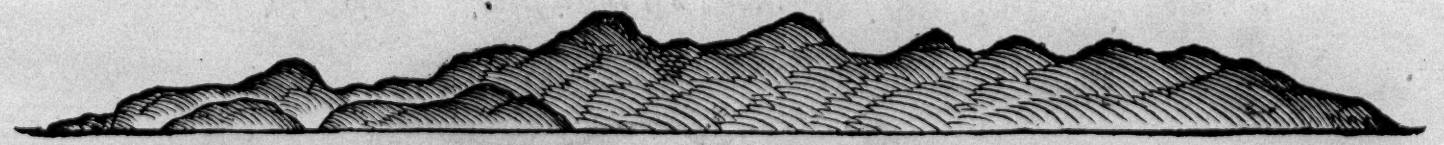
When Tercera is foure or fiue leagues ſouthweſt from you, then it ariſeth thus, the weſt end of this Iland Tercera is higher then the eaſt end, thereby it is indifferent good to be known.

Thus ſheweth Tercera on the north ſide.

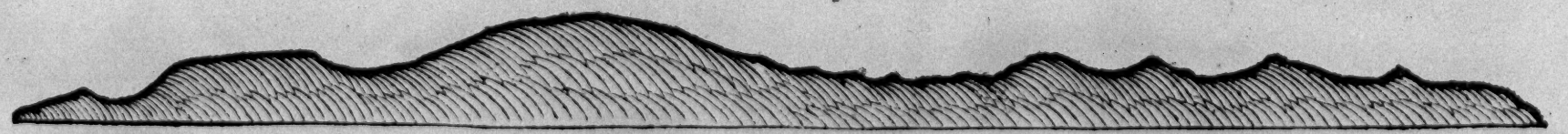
Thus



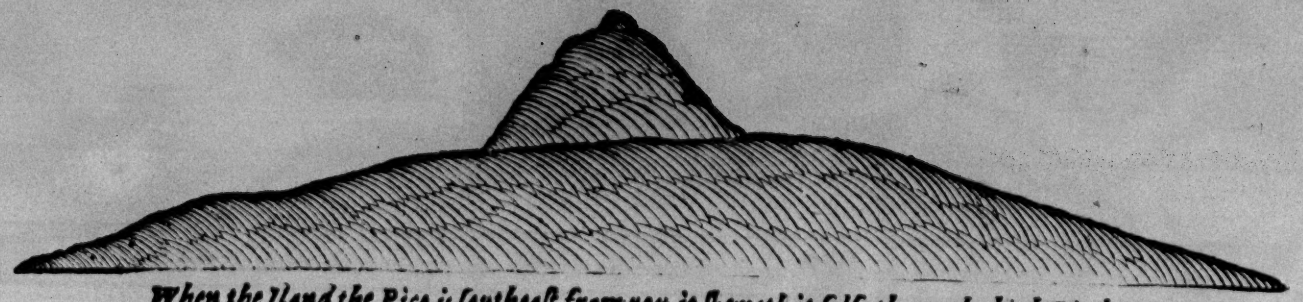
Thus sheweth Tersera on the south side when you saile alongst by it.



Thus sheweth the Iland S. Georges when it lyeth s. s. w. from you seven leagues.

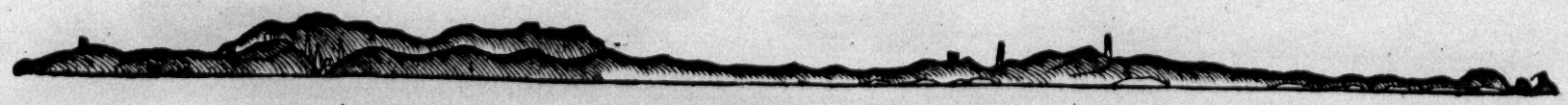


When the west end of S. Georges is south and by east, and the east end southeast from you, it sheweth it selfe thus, being eight or nine leagues off from it.



When the Iland the Pico is southeast from you, it sheweth it selfe thus, the high Pieck you may see about fortie leagues off from it at sea.

The Iland Fayal sheweth it selfe thus when it is south from you eight or nine leagues.



When the Iland Gratiosa lyeth westsouthwest foure leagues from you, then it ariseth in this forme.

To the Booke-binder.

Place the Cardes thus.

Numb.	*before*	*fol.*
103 and 104	— — —	171
105	— — —	177
106 and 107	— — —	179
108	— — —	187

NOTE

This volume has a very tight binding and while every effort has been made to reproduce the centres, force would result in damage

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The sea-mirror. Tr. R.
Hynmers. 4°. W. Johnson
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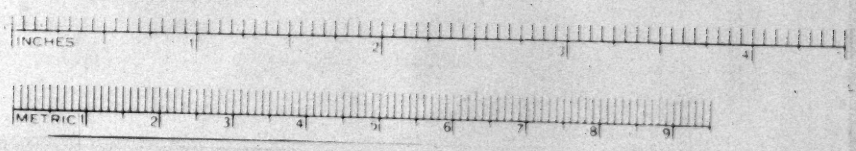

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